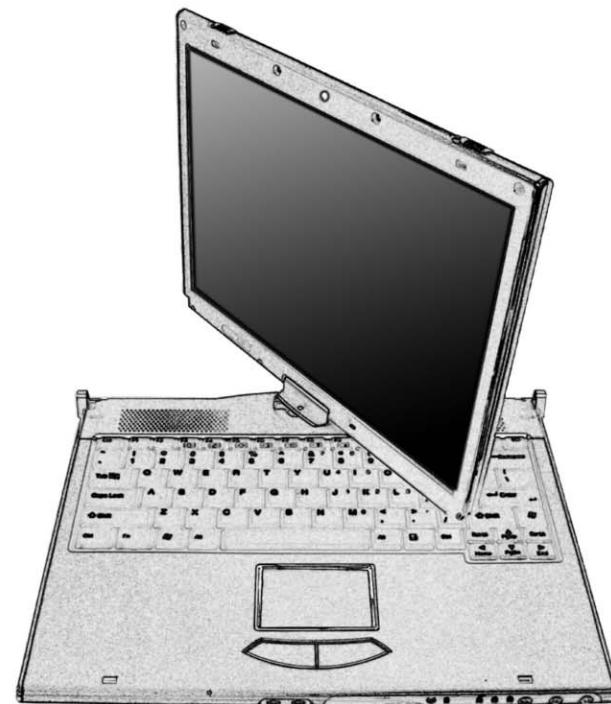


# *SERVICE MANUAL*

**T2C (T200C / T210C)**

*notebook*





# **TabletNote Computer**

**T200C/T210C**

**T200V/T210V**

**Service Manual**

## Notice

The company reserves the right to revise this publication or to change its contents without notice. Information contained herein is for reference only and does not constitute a commitment on the part of the manufacturer or any subsequent vendor. They assume no responsibility or liability for any errors or inaccuracies that may appear in this publication nor are they in anyway responsible for any loss or damage resulting from the use (or misuse) of this publication.

This publication and any accompanying software may not, in whole or in part, be reproduced, translated, transmitted or reduced to any machine readable form without prior consent from the vendor, manufacturer or creators of this publication, except for copies kept by the user for backup purposes.

Brand and product names mentioned in this publication may or may not be copyrights and/or registered trademarks of their respective companies. They are mentioned for identification purposes only and are not intended as an endorsement of that product or its manufacturer.

Version 1.0  
November 2003

## Trademarks

**Intel®** and **Pentium®** are registered trademarks of Intel Corporation.

**Windows®** is a registered trademark of Microsoft Corporation.

Other brand and product names are trademarks and/or registered trademarks of their respective companies.

## **About this Manual**

This manual is intended for service personnel who have completed sufficient training to undertake the maintenance and inspection of personal computers.

It is organized to allow you to look up basic information for servicing and/or upgrading components of the computer.

The following information is included:

Chapter 1, Introduction, provides general information about the location of system elements and their specifications.

Chapter 2, Disassembly, provides step-by-step instructions for disassembling parts and subsystems and how to upgrade elements of the system.

Appendix A, Part Lists

Appendix B, T2X0C Schematic Diagrams

Appendix C, T2X0V Schematic Diagrams

## Preface

---

### Related Documents

You may also need to consult the following manual for additional information:

#### User's Manual on CD

This describes the computer's features and the procedures for operating the computer and its ROM-based setup program. It also describes the installation and operation of the utility programs provided with the computer.

## **Introduction .....1-1**

Overview .....	1-1
Model Differences .....	1-2
System Specifications T200C/T210C .....	1-3
System Specifications T200D/T210D .....	1-5
System Specifications T200V/T210V .....	1-7
System Specifications T200H/T210H .....	1-9
External Locator - Top View with LCD Open .....	1-11
Rotating the LCD Swivel Screen .....	1-12
External Location - Front & Rear Views .....	1-14
External Locator - Left & Right Views .....	1-15
External Locator - Bottom View .....	1-16
T2X0C/T2X0D Mainboard Overview - Top .....	1-17
T2X0C/T2X0D Mainboard Overview - Bottom .....	1-18
T2X0C/T2X0D Mainboard Overview - Top .....	1-19
T2X0C/T2X0D Mainboard Overview - Bottom .....	1-20
T2X0V/T2X0H Mainboard Overview - Top .....	1-21
T2X0V/T2X0H Mainboard Overview - Bottom .....	1-22
T2X0V/T2X0H Mainboard Overview - Top .....	1-23
T2X0V/T2X0H Mainboard Overview - Bottom .....	1-24

## **Disassembly .....2-1**

Overview .....	2-1
Disassembly Steps .....	2-4
Removing the Battery .....	2-5
Removing the Hard Disk .....	2-6
Removing the System Memory (RAM) .....	2-7
Removing the Intel WLAN Module (T2X0C/T2X0D Only) .....	2-8
Removing the Processor (T2X0C/T2X0D Only) .....	2-9

## **Contents**

### **Part Lists .....A-1**

Part List Illustration Location .....	A-1
Top (T200C) .....	A-2
Bottom (T200C) .....	A-3
14.1" LCD (T200C) .....	A-4
Hard Disk Drive (T200C) .....	A-5
Top (T210C) .....	A-6
Bottom (T210C) .....	A-7
14.1" LCD (T210C) .....	A-8
Hard Disk Drive (T210C) .....	A-9
Top (T200V) .....	A-10
Bottom (T200V) .....	A-11
14.1" LCD (T200V) .....	A-12
Hard Disk Drive (T200V) .....	A-13
Top (T210V) .....	A-14
Bottom (T210V) .....	A-15
14.1" LCD (T210V) .....	A-16
Hard Disk Drive (T210V) .....	A-17

### **T200C/T210C Schematic Diagrams .....B-1**

System Block Diagram .....	B-2
Pentium-M-1 .....	B-3
Pentium-M-2 .....	B-4
855GM-1 .....	B-5
855GM-2 .....	B-6
855GM-3 .....	B-7
DDR SODIMM .....	B-8
DDR Termination .....	B-9
LVDS, CRT .....	B-10

**Preface**

Clock Generator .....	B-11
ICH4-1 .....	B-12
ICH4-2 .....	B-13
ICH4-3, HDD .....	B-14
USB2.0 Port .....	B-15
MDC, Mini PCI .....	B-16
LAN RTL8100BL .....	B-17
PCMCIA ENE CB710 .....	B-18
PCM Socket, 4 IN 1 Socket .....	B-19
SIO, BIOS .....	B-20
Touch Panel .....	B-21
Hitachi H8S .....	B-22
LED B'd, HOT KEY B'd, FAN, K/B .....	B-23
CODEC, AMP .....	B-24
+3VS, +5VS .....	B-25
+2.5V, +1.25V, 1.5V .....	B-26
V_CORE/ +VCCP/ +1.2VS .....	B-27
5V, 3.3V, +1.2, 1.5V .....	B-28
Charger .....	B-29
Hot Key .....	B-30
Inverter .....	B-31
LCD LED Board .....	B-32

**T200V/T210V Schematic Diagrams .... C-1**

System Block Diagram .....	C-2
VIA C3 (1 of 2) .....	C-3
VIA C3 (2 of 2) .....	C-4
VT8623 (1 of 3) .....	C-5
VT8623 (2 of 3) .....	C-6
VT8623 (3 of 3) .....	C-7
DDR SO-DIMM .....	C-8
DDR Termination .....	C-9

LVDS Transmitter, Panel I/F .....	C-10
Clock (W311 + W256) .....	C-11
VT2835 (1 of 3) .....	C-12
VT2835 (2 of 3) .....	C-13
VT2835 (3 of 3) .....	C-14
All USB 2.0 Port .....	C-15
HDD, MDC, BT, Indicator, WLAN .....	C-16
LAN PHY VT6103 .....	C-17
PCMCIA ENE CB710 .....	C-18
PCM Socket, 4 In 1 Socket .....	C-19
SIO, BIOS, FIR .....	C-20
H8S / 2104LPC .....	C-21
Fan, CRT, Inverter, DC, Power_GD .....	C-22
Audio Codec VT1616 .....	C-23
Touch Panel Controller .....	C-24
System Power 1 .....	C-25
System Power 2 .....	C-26
System Power 3 .....	C-27
CPU VCORE .....	C-28
Charger .....	C-29

# 1: Introduction

## Overview

This manual covers the information you need to service or upgrade the T200C/T210C/T200D/T210D/T200V/T210V/T200H/T210H TabletNote computer. Information about operating the computer (e.g. getting started, and the *Setup* utility) is in the *User's Manual*. Information about drivers (e.g. VGA & audio) is also found in *User's Manual*. That manual is shipped with the computer.

Operating systems (e.g. *DOS*, *Windows 9x*, *Windows NT 4.0*, *Windows 2000*, *Windows XP*, *OS/2 Warp*, *UNIX*, etc.) have their own manuals as do application software (e.g. word processing and database programs). If you have questions about those programs, you should consult those manuals.

The T200C/T210C/T200D/T210D/T200V/T210V/T200H/T210H TabletNote computer is designed to be upgradeable. See "["Disassembly" on page 2 - 1](#)" for a detailed description of the upgrade procedures for each specific component. Please note the warning and safety information indicated by the "⚠" symbol.

The balance of this chapter reviews the computer's technical specifications and features.

## Introduction

---

# Model Differences

The differences between the model types are indicated in the table and pictures below.

## Specifications

*Table 1 - 1*  
**Model  
Specifications**

Feature/Model	T200C T210C	T200D T210D	T200V T210V	T200H T210H
Processor Type	Intel Pentium® M	Intel Pentium® M	VIA Antaur	VIA Antaur
Touch Panel Functionality Supported	Yes	No	Yes	No

## Designs

*Figure 1 - 1*  
**Design Differences**



*Table 1 - 2*  
**T200C/T210C  
 System  
 Specifications**

## System Specifications T200C/T210C

Feature	Specification T200C & T210C	
<b>Processor Types</b>	Intel Pentium® M Processor (478-pin) Micro-FCPGA Package	(μ0.13) 0.13 Micron Process Technology, 1MB On-Die L2 Cache & 400MHz Front Side Bus - 1.3/ 1.4/ 1.5/ 1.6/ 1.7 GHz
<b>Core Logic</b>	Intel® 855 GM + Intel 82801DBM (ICH4-M)	
<b>Security</b>	Security (Kensington® Type) Lock Slot	BIOS Password
<b>Memory</b>	Two 200 Pin DDR SODIMM Sockets Supporting DDR 266 MHz Modules	Supporting 256/512MB DDR RAM Modules Expandable up to 1024 MB
<b>BIOS</b>	ACPI 4MB Flash ROM Insyde BIOS	
<b>LCD</b>	Flat Panel TFT - 14.1" XGA LCD with Built-in Touch Panel and Stylus Pen Supporting 1024 * 768 dot resolution LCD Swivel Hinge (allows conversion between Notebook and Tablet Modes)	
<b>Display</b>	Intel Chipset 855GM Integrated Graphics Shared Video Memory Architecture Supporting up to 32MB (Default Setting 32MB)	
<b>Storage</b>	Easy Changeable 2.5" 9.5 mm (h) IDE HDD Supporting Ultra DMA 66/100	Built-in 4-in-1 Card Reader for the following formats: SD (Secure Digital) MMC (Multi Media Card) MS (Memory Stick) SM (Smart Media Card)
<b>Audio</b>	Integrated Direct Sound Audio Compliant with AC'97 2.2 2 Built-In Speakers	
<b>Keyboard,      Pointing Device &amp;      Buttons</b>	Winkey Keyboard Built-In TouchPad	4 Hardware Buttons: "Q" for screen rotation/power Tab Escape Scroll Up/Scroll Down/Enter
<b>Indicators</b>	7 LED Indicators (Power/Suspend, Battery, HDD, Caps Lock, Scroll Lock, Num Lock, Wireless LAN)	

## Introduction

---

Feature	Specification T200C & T210C		
<b>Interface &amp; Communication</b>	Two USB 2.0/1.1 Ports One Type-II PCMCIA 3.3V/5V Socket One Stereo Headphone-Out Jack One Monaural Microphone-In Jack One RJ-11 (V.90 K56flex™) Jack for Fax/Modem MDC Modem Module Supporting Wake On Ring	One RJ-45 Jack for 100M (Max) Fast Ethernet Intel Pro 2100 ( <b>802.11b</b> ) Mini PCI Wireless LAN Module One External (VGA) Monitor Port One DC-in Jack One Infrared FIR, IrDA 1.1 Transceiver One Type II PCMCIA 3.3V/5V Socket Supporting CardBus	
<b>Power Management</b>	Supports ACPI v1.0b Supports Hibernate Mode Supports Standby Mode Supports Battery Low Sleep	Supports Resume From Modem Ring Supports Resume From LAN Close Cover Switch	
<b>Power</b>	Full Range AC adapter AC Input 100~240V, 50~60Hz DC Output 20V, 3.25A, <b>65W</b>	One Primary Smart Lithium-Ion (1800mAH x 6 cells) Battery Pack with Gas Gauge	
<b>Environmental Spec</b>	<b>Temperature</b> Operating: 5°C ~ 35°C Non-Operating: -20°C ~ 60°C	<b>Relative Humidity</b> Operating: 20% ~ 80% Non-Operating: 10% ~ 90%	
<b>Physical Dimensions &amp; Weight</b>	313 (w) x 265 (d) x 26.5/29.5(h) mm	2.3 Kg Without Battery	
<b>Optional</b>	PC Camera ( <b>factory option</b> ) Smart Lithium-Ion Battery Pack Standard - 1800mAH x 6 cells (40W) Optional - 1800mAH x 8 cells (53W)  Handwriting Recognition Utility Car Adapter <b>MDC Module (factory option)</b> Intel Pro 2100 ( <b>802.11b</b> ) Mini PCI Wireless LAN Module	External FDD with USB Interface External Slim Optical Drive with One of the Following Options: CD-ROM DVD-ROM CD-RW Combo DVD-RW DVD+RW	

---

## 1 - 4 System Specifications T200C/T210C

*Table 1 - 3*  
**T200D/T210D  
 System  
 Specifications**

## System Specifications T200D/T210D

Feature	Specification T200D & T210D	
<b>Processor Types</b>	Intel Pentium® M Processor (478-pin) Micro-FCPGA Package	(μ0.13) 0.13 Micron Process Technology, 1MB On-Die L2 Cache & 400MHz Front Side Bus - 1.3/ 1.4/ 1.5/ 1.6/ 1.7 GHz
<b>Core Logic</b>	Intel® 855 GM + Intel 82801DBM (ICH4-M)	
<b>Security</b>	Security (Kensington® Type) Lock Slot	BIOS Password
<b>Memory</b>	Two 200 Pin DDR SODIMM Sockets Supporting DDR 266 MHz Modules	Supporting 256/512MB DDR RAM Modules Expandable up to 1024 MB
<b>BIOS</b>	ACPI 4MB Flash ROM Insyde BIOS	
<b>LCD</b>	Flat Panel TFT - 14.1" XGA LCD Supporting 1024 * 768 dot resolution LCD Swivel Hinge (allows conversion between Notebook and Tablet Modes)	
<b>Display</b>	Intel Chipset 855GM Integrated Graphics Shared Video Memory Architecture Supporting up to 32MB (Default Setting 32MB)	
<b>Storage</b>	Easy Changeable 2.5" 9.5 mm (h) IDE HDD Supporting Ultra DMA 66/100	Built-in 4-in-1 Card Reader for the following formats: SD (Secure Digital) MMC (Multi Media Card) MS (Memory Stick) SM (Smart Media Card)
<b>Audio</b>	Integrated Direct Sound Audio Compliant with AC'97 2.2 2 Built-In Speakers	
<b>Keyboard,      Pointing Device &amp;      Buttons</b>	Winkey Keyboard Built-In TouchPad	4 Hardware Buttons: "Q" for screen rotation/power Tab Escape Scroll Up/Scroll Down/Enter
<b>Indicators</b>	7 LED Indicators (Power/Suspend, Battery, HDD, Caps Lock, Scroll Lock, Num Lock, Wireless LAN)	

## Introduction

---

Feature	Specification T200D & T210D		
<b>Interface &amp; Communication</b>	Two USB 2.0/1.1 Ports One Type-II PCMCIA 3.3V/5V Socket One Stereo Headphone-Out Jack One Monaural Microphone-In Jack One RJ-11 (V.90 K56flex™) Jack for Fax/Modem MDC Modem Module Supporting Wake On Ring	One RJ-45 Jack for 100M (Max) Fast Ethernet Intel Pro 2100 ( <b>802.11b</b> ) Mini PCI Wireless LAN Module One External (VGA) Monitor Port One DC-in Jack One Infrared FIR, IrDA 1.1 Transceiver One Type II PCMCIA 3.3V/5V Socket Supporting CardBus	
<b>Power Management</b>	Supports ACPI v1.0b Supports Hibernate Mode Supports Standby Mode Supports Battery Low Sleep	Supports Resume From Modem Ring Supports Resume From LAN Close Cover Switch	
<b>Power</b>	Full Range AC adapter AC Input 100~240V, 50~60Hz DC Output 20V, 3.25A, <b>65W</b>	One Primary Smart Lithium-Ion (1800mAH x 6 cells) Battery Pack with Gas Gauge	
<b>Environmental Spec</b>	<b>Temperature</b> Operating: 5°C ~ 35°C Non-Operating: -20°C ~ 60°C	<b>Relative Humidity</b> Operating: 20% ~ 80% Non-Operating: 10% ~ 90%	
<b>Physical Dimensions &amp; Weight</b>	313 (w) x 265 (d) x 26.5/29.5(h) mm	2.3 Kg Without Battery	
<b>Optional</b>	PC Camera ( <b>factory option</b> ) Smart Lithium-Ion Battery Pack Standard - 1800mAH x 6 cells (40W) Optional - 1800mAH x 8 cells (53W) Handwriting Recognition Utility Car Adapter MDC Module ( <b>factory option</b> ) Intel Pro 2100 ( <b>802.11b</b> ) Mini PCI Wireless LAN Module	External FDD with USB Interface External Slim Optical Drive with One of the Following Options: CD-ROM DVD-ROM CD-RW Combo DVD-RW DVD+RW	

*Table 1 - 4*  
**T200V/T210V**  
**System**  
**Specifications**

## System Specifications T200V/T210V

Feature	Specification T200V & T210V	
<b>Processor Types</b>	VIA Antaur 1.0 GHz	
<b>Core Logic</b>	CLE266CE	
<b>Security</b>	Security (Kensington® Type) Lock Slot	BIOS Password
<b>Memory</b>	Two 200 Pin DDR SODIMM Sockets Supporting DDR 266 MHz Modules	Supporting 256/512MB DDR RAM Modules Expandable up to 1024 MB
<b>BIOS</b>	ACPI 4MB Flash ROM Insyde BIOS	
<b>LCD</b>	Flat Panel TFT - 14.1" XGA LCD with Built-in Touch Panel and Stylus Pen Supporting 1024 * 768 dot resolution LCD Swivel Hinge (allows conversion between Notebook and Tablet Modes)	
<b>Storage</b>	Easy Changeable 2.5" 9.5 mm (h) IDE HDD Supporting ATA-33/66/100	Built-in 4-in-1 Card Reader for the following formats: SD (Secure Digital) MMC (Multi Media Card) MS (Memory Stick) SM (Smart Media Card)
<b>Audio</b>	AC'97 2.1 Compliant 2 Built-In Speakers	
<b>Keyboard, Pointing Device &amp; Buttons</b>	Winkey Keyboard Built-In TouchPad	4 Hardware Buttons: "Q" for screen rotation/power Tab Escape Scroll Up/Scroll Down/Enter
<b>Indicators</b>	7 LED Indicators (Power/Suspend, Battery, HDD, Caps Lock, Scroll Lock, Num Lock, Wireless LAN)	
<b>Interface &amp; Communication</b>	Two USB 2.0/1.1 Ports One Type-II PCMCIA 3.3V/5V Socket One Stereo Headphone-Out Jack One Monaural Microphone-In Jack One RJ-11 (V.90 K56flex™) Jack for Fax/Modem MDC Modem Module Supporting Wake On Ring	One RJ-45 Jack for 100M (Max) Fast Ethernet One External (VGA) Monitor Port One DC-in Jack One Infrared FIR, IrDA 1.1 Transceiver One Type II PCMCIA 3.3V/5V Socket Supporting CardBus

## Introduction

---

Feature	Specification T200V & T210V	
<b>Power Management</b>	Supports ACPI v1.0b Supports Hibernate Mode Supports Standby Mode Supports Battery Low Sleep	Supports Resume From Modem Ring Supports Resume From LAN Close Cover Switch
<b>Power</b>	Full Range AC adapter AC Input 100~240V, 50~60Hz DC Output 20V, 2.5A, <b>50W</b>	One Primary Smart Lithium-Ion (1800mAH x 6 cells) Battery Pack with Gas Gauge
<b>Environmental Spec</b>	<b>Temperature</b> Operating: 5°C ~ 35°C Non-Operating: -20°C ~ 60°C	<b>Relative Humidity</b> Operating: 20% ~ 80% Non-Operating: 10% ~ 90%
<b>Physical Dimensions &amp; Weight</b>	313 (w) x 265 (d) x 26.5/29.5(h) mm Min	2.2 Kg Without Battery Pack
<b>Optional</b>	PC Camera ( <b>factory option</b> ) Smart Lithium-Ion Battery Pack  Standard - 1800mAH x 6 cells Optional - 1800mAH x 8 cells  Handwriting Recognition Utility Car Adapter MDC Module ( <b>factory option</b> ) 802.11b Wireless LAN Module with USB Interface	External FDD with USB Interface External Slim Optical Drive with One of the Following Options:  CD-ROM DVD-ROM CD-RW Combo

*Table 1 - 5*  
**T200H/T210H**  
**System**  
**Specifications**

## System Specifications T200H/T210H

Feature	Specification T200H & T210H	
<b>Processor Types</b>	VIA Antaur 1.0 GHz	
<b>Core Logic</b>	CLE266CE	
<b>Security</b>	Security (Kensington® Type) Lock Slot	BIOS Password
<b>Memory</b>	Two 200 Pin DDR SODIMM Sockets Supporting DDR 266 MHz Modules	Supporting 256/512MB DDR RAM Modules Expandable up to 1024 MB
<b>BIOS</b>	ACPI 4MB Flash ROM Insyde BIOS	
<b>LCD</b>	Flat Panel TFT - 14.1" XGA LCD Supporting 1024 * 768 dot resolution LCD Swivel Hinge (allows conversion between Notebook and Tablet Modes)	
<b>Storage</b>	Easy Changeable 2.5" 9.5 mm (h) IDE HDD Supporting ATA-33/66/100	Built-in 4-in-1 Card Reader for the following formats: SD (Secure Digital) MMC (Multi Media Card) MS (Memory Stick) SM (Smart Media Card)
<b>Audio</b>	AC'97 2.1 Compliant 2 Built-In Speakers	
<b>Keyboard, Pointing Device &amp; Buttons</b>	Winkey Keyboard Built-In TouchPad	4 Hardware Buttons: "Q" for screen rotation/power Tab Escape Scroll Up/Scroll Down/Enter
<b>Indicators</b>	7 LED Indicators (Power/Suspend, Battery, HDD, Caps Lock, Scroll Lock, Num Lock, Wireless LAN)	
<b>Interface &amp; Communication</b>	Two USB 2.0/1.1 Ports One Type-II PCMCIA 3.3V/5V Socket One Stereo Headphone-Out Jack One Monaural Microphone-In Jack One RJ-11 (V.90 K56flex™) Jack for Fax/Modem MDC Modem Module Supporting Wake On Ring	One RJ-45 Jack for 100M (Max) Fast Ethernet One External (VGA) Monitor Port One DC-in Jack One Infrared FIR, IrDA 1.1 Transceiver One Type II PCMCIA 3.3V/5V Socket Supporting CardBus

## Introduction

---

Feature	Specification T200H & T210H	
<b>Power Management</b>	Supports ACPI v1.0b Supports Hibernate Mode Supports Standby Mode Supports Battery Low Sleep	Supports Resume From Modem Ring Supports Resume From LAN Close Cover Switch
<b>Power</b>	Full Range AC adapter AC Input 100~240V, 50~60Hz DC Output 20V, 2.5A, <b>50W</b>	One Primary Smart Lithium-Ion (1800mAH x 6 cells) Battery Pack with Gas Gauge
<b>Environmental Spec</b>	<b>Temperature</b> Operating: 5°C ~ 35°C Non-Operating: -20°C ~ 60°C	<b>Relative Humidity</b> Operating: 20% ~ 80% Non-Operating: 10% ~ 90%
<b>Physical Dimensions &amp; Weight</b>	313 (w) x 265 (d) x 26.5/29.5(h) mm Min	2.2 Kg Without Battery Pack
<b>Optional</b>	PC Camera ( <b>factory option</b> ) Smart Lithium-Ion Battery Pack  Standard - 1800mAH x 6 cells Optional - 1800mAH x 8 cells  Handwriting Recognition Utility Car Adapter MDC Module ( <b>factory option</b> ) 802.11b Wireless LAN Module with USB Interface	External FDD with USB Interface External Slim Optical Drive with One of the Following Options:  CD-ROM DVD-ROM CD-RW Combo

### External Locator - Top View with LCD Open

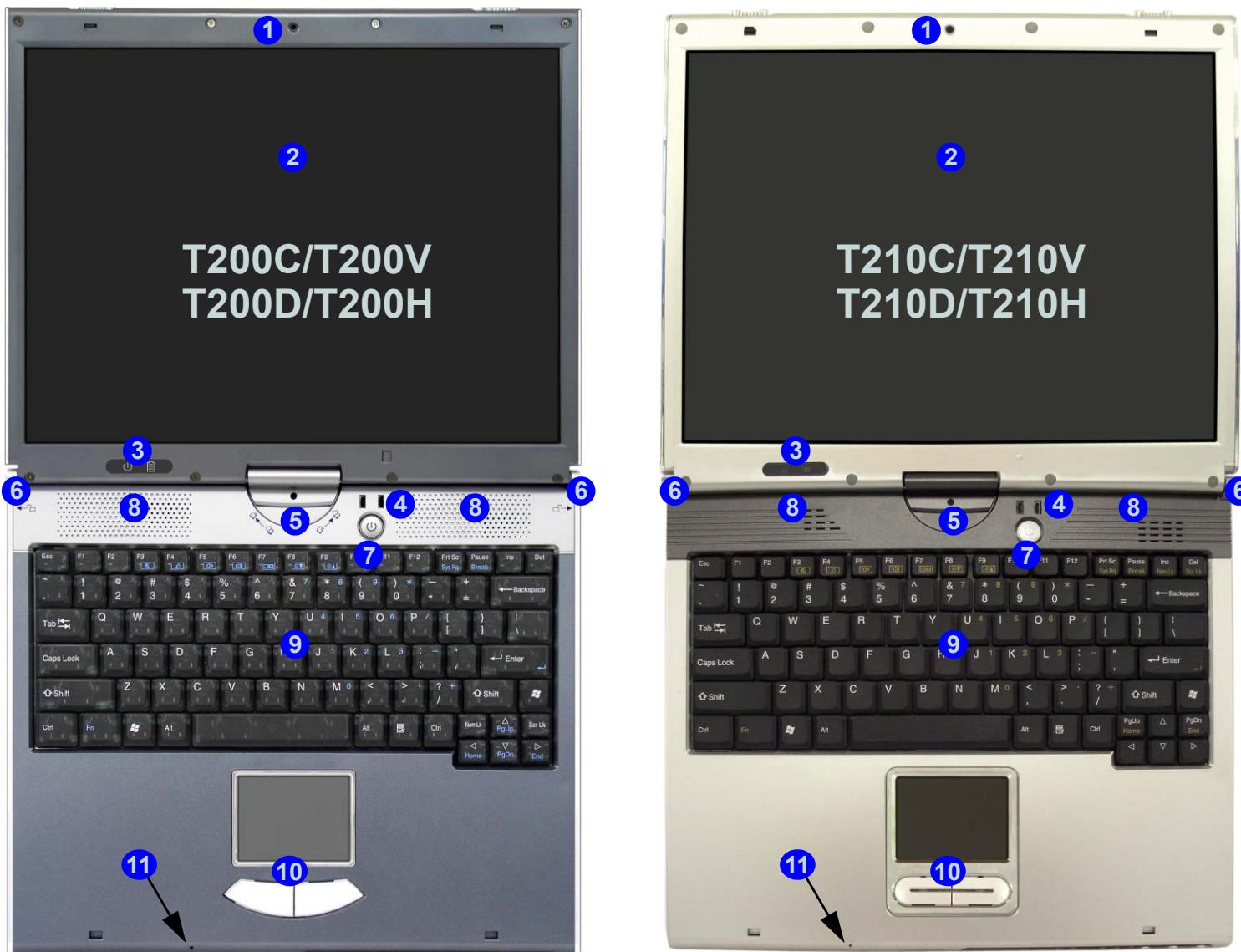


Figure 1 - 2  
Top View with LCD Panel Open

1. Built-In PC Camera (Optional)
2. LCD Swivel Screen
3. LED Power Indicators
4. Cover Sensors
5. LCD Swivel Hinge
6. LCD Side Hinges
7. Power Button
8. Speakers
9. Keyboard
10. TouchPad and Buttons
11. Built-In Microphone

## Introduction

### Rotating the LCD Swivel Screen

Figure 1 - 3

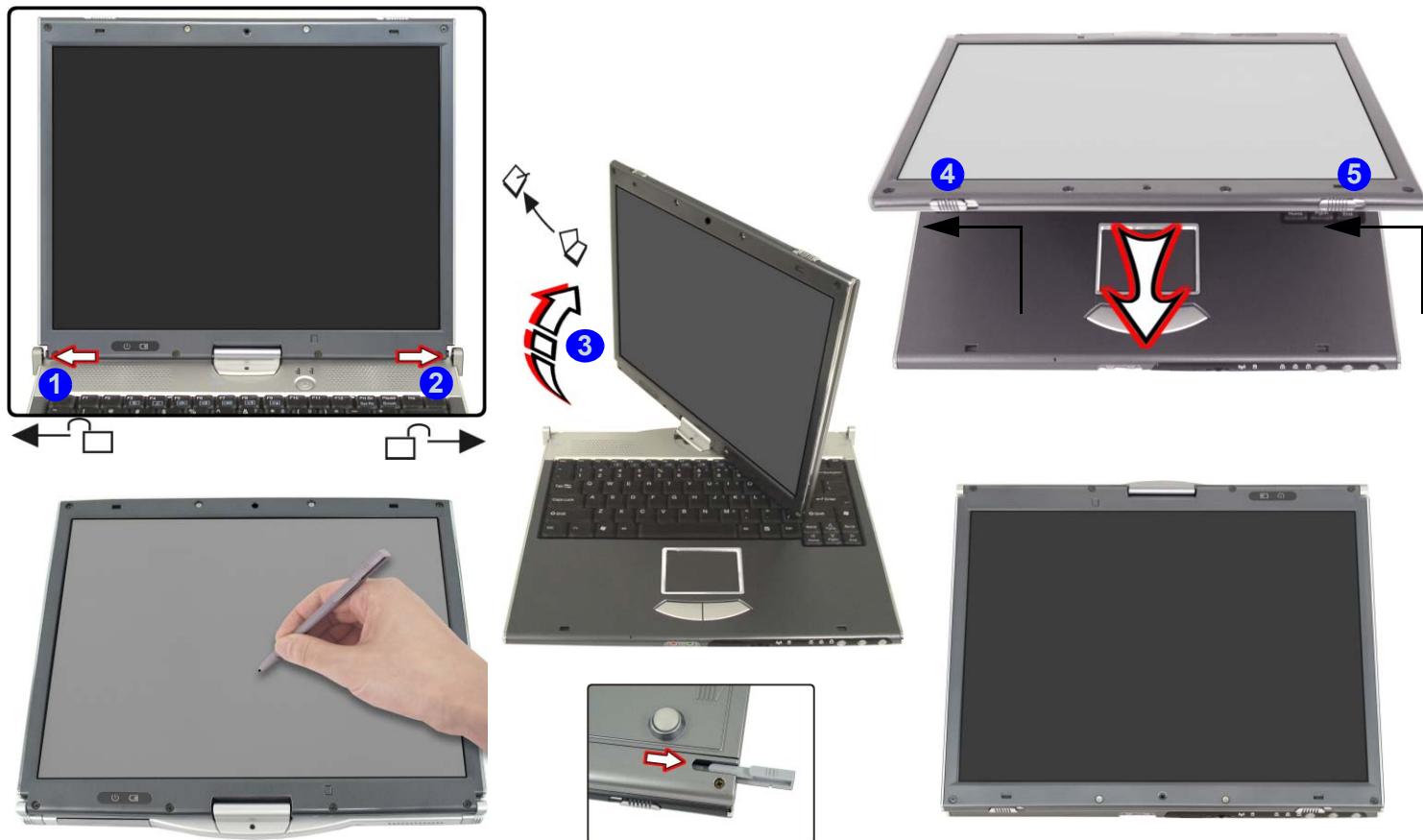
#### Rotating the LCD Swivel Screen



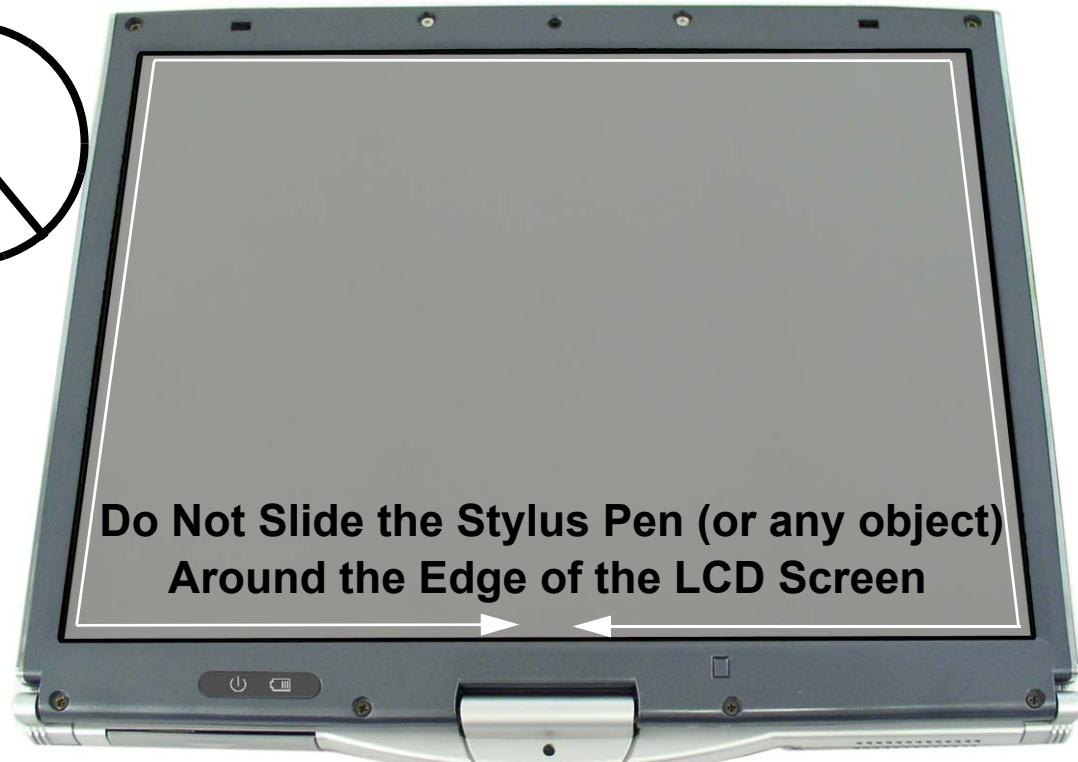
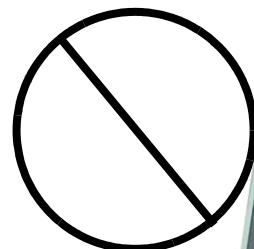
##### Lid Button

It is recommended that the lid (left LCD cover sensor) power button to should be set to "Do nothing" in the Power Options control panel.

This will prevent accidentally triggering a power saving mode when you rotate the LCD swivel screen.



1. Unlock the LCD side hinges ① & ② by moving them in the direction of the arrows.
2. Carefully rotate the LCD fully in the direction indicated by the arrow ③, then lock the side hinges ① & ②.
3. Move latches ④ & ⑤ in and to the left (if they are not already in this position), then push the LCD down to lock it in position.



### Touch Panel Warning

Users should be very careful not to press too hard with the stylus pen when using it as the input device. Only the approved stylus pen provided should be used as the input device. Users should avoid sliding the stylus pen (or any object) in the area around the edge of the screen (between the LCD and the frame) when writing on the screen,



### Touch Panel Input Device

Do not use any sharp or pointed objects as an input device e.g. the end of a pen or pencil. Only use the provided stylus pen (PDA type) as an input device.

*Figure 1 - 4  
Touch Panel  
Warning*

## Introduction

### External Location - Front & Rear Views

Figure 1 - 5  
Front View

1. LCD Latches
2. Microphone-In Jack
3. Headphone-Out Jack
4. Infrared Transceiver
5. Scroll/Enter Wheel
6. LED Status Indicators
7. 3 \* Hot-Key Buttons (Esc, Tab, & "Q" Rotate)



Figure 1 - 6  
Rear View

8. External Monitor (CRT) Port
9. RJ-45 LAN Jack
10. RJ-11 Phone Jack
11. DC-In Jack
12. Vent



## **External Locator - Left & Right Views**



*Figure 1 - 7  
Left View*

1. Security Lock Slot
2. Vent
3. Stylus Pen Holder



*Figure 1 - 8  
Right View*

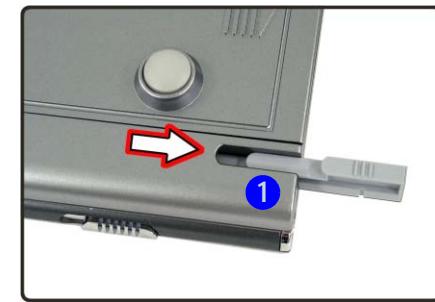
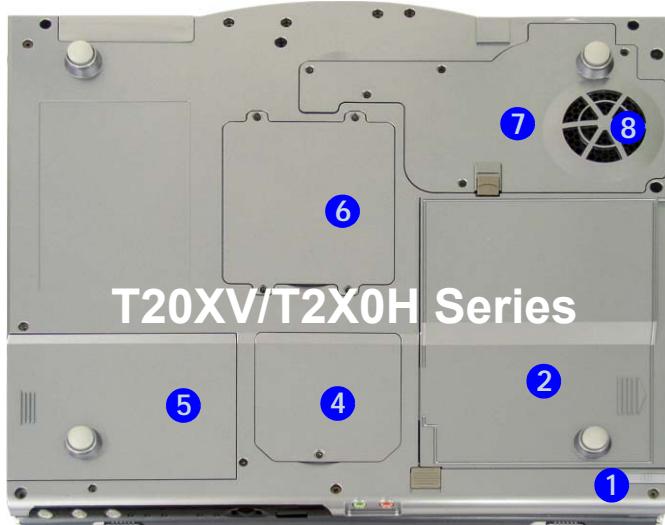
4. 4-in-1 Flash Card Reader
5. 2 \* USB 2.0 Ports
6. PC Card Slot

## Introduction

Figure 1 - 9  
Bottom View

1. Stylus Pen Holder
2. Battery
3. Intel WLAN Module Cover
4. Modem & Wireless LAN Module Cover
5. Hard Disk Cover
6. RAM Cover
7. CPU Cover
8. Fan Intake

## External Locator - Bottom View



### Wireless Device Operation Aboard Aircraft

The use of any portable electronic transmission devices aboard aircraft is usually prohibited.

Make sure the module is **OFF** if you are using the computer aboard aircraft. When the computer 'Boots Up' the module will be **ON**.

To toggle power to the WLAN module use the key combination **Fn + F11**.

## T2X0C/T2X0D Mainboard Overview - Top

### Key Parts

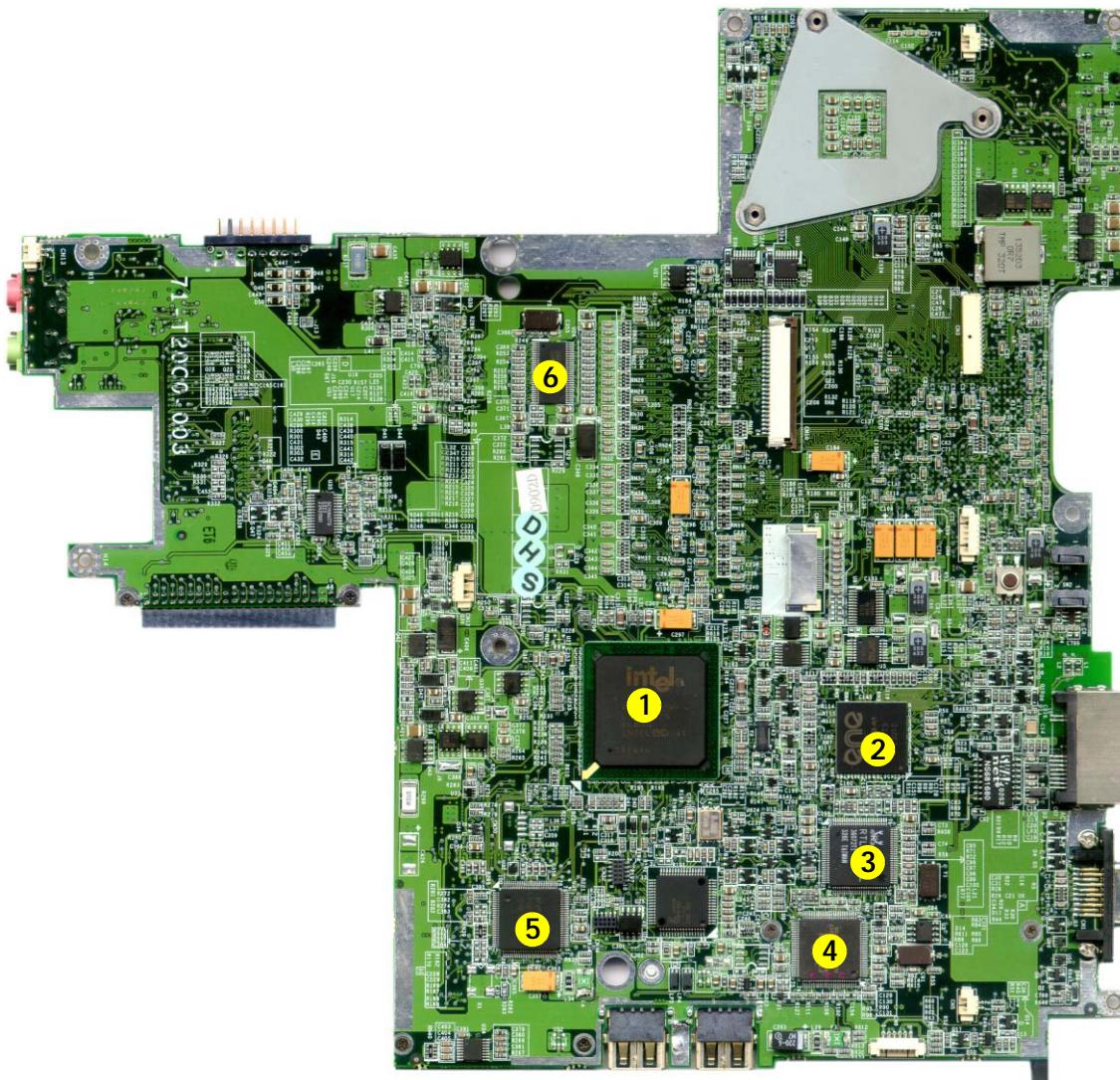


Figure 1 - 10  
T2X0C/T2X0D  
Mainboard  
Overview - Top  
Key Parts

1. Intel ICH4 421 BGA
2. CardBus ENE CB710
3. LAN Controller RTL8100BL
4. Hitachi H8
5. NS 87393
6. Clock Generator

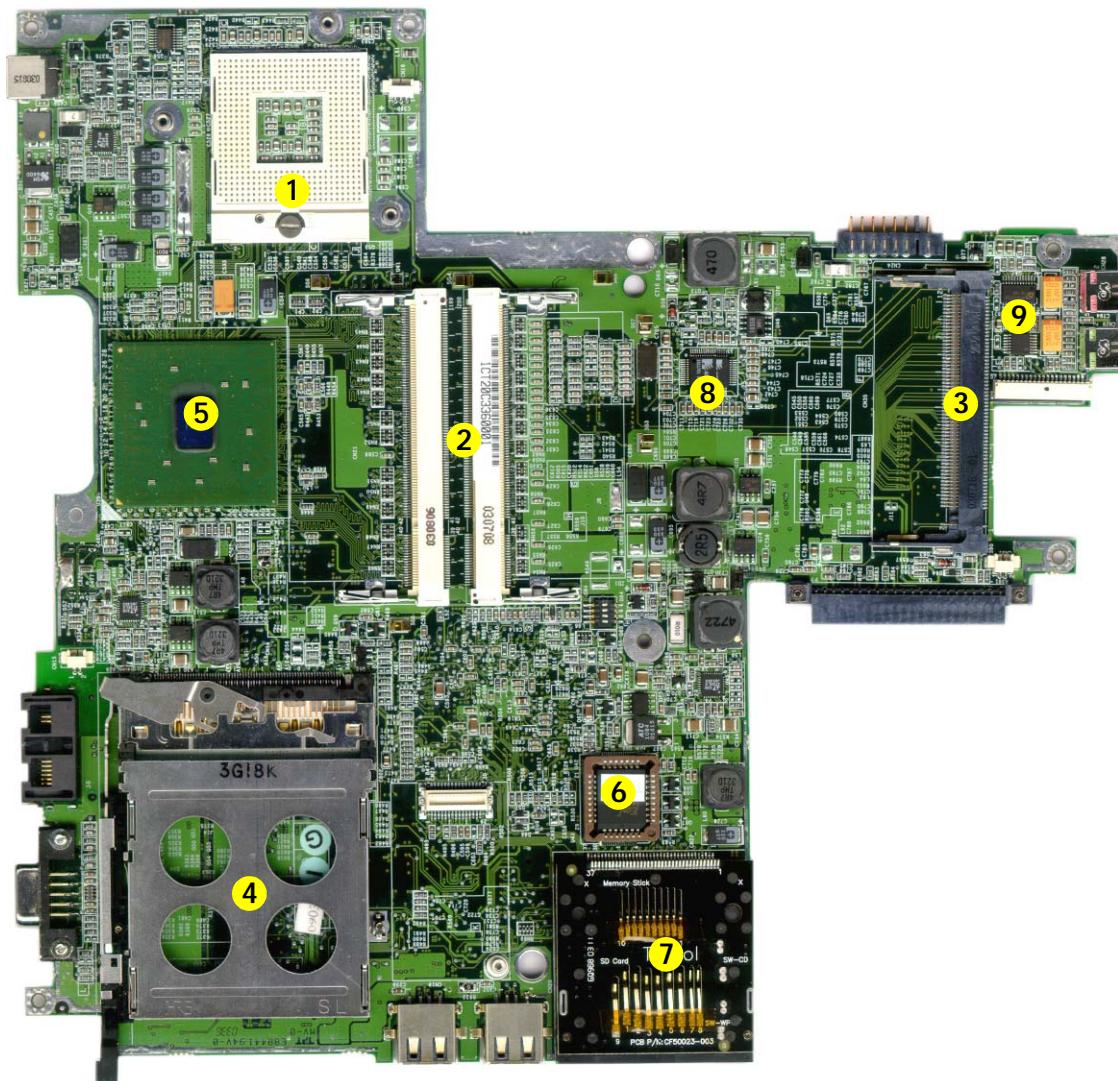
## Introduction

*Figure 1 - 11*  
**T2X0C/T2X0D  
Mainboard  
Overview - Bottom  
Key Parts**

1. CPU Socket (no CPU installed)
2. Memory Sockets
3. WLAN Module Socket
4. PCMCIA Socket
5. Intel 855GM(E) 732 Micro FCBGA
6. Flash RAM BIOS
7. 4-in-1 Card Reader Module
8. CODEC ALC201A
9. AMP APA2020A

## T2X0C/T2X0D Mainboard Overview - Bottom

### Key Parts



## T2X0C/T2X0D Mainboard Overview - Top

### Cable Connectors

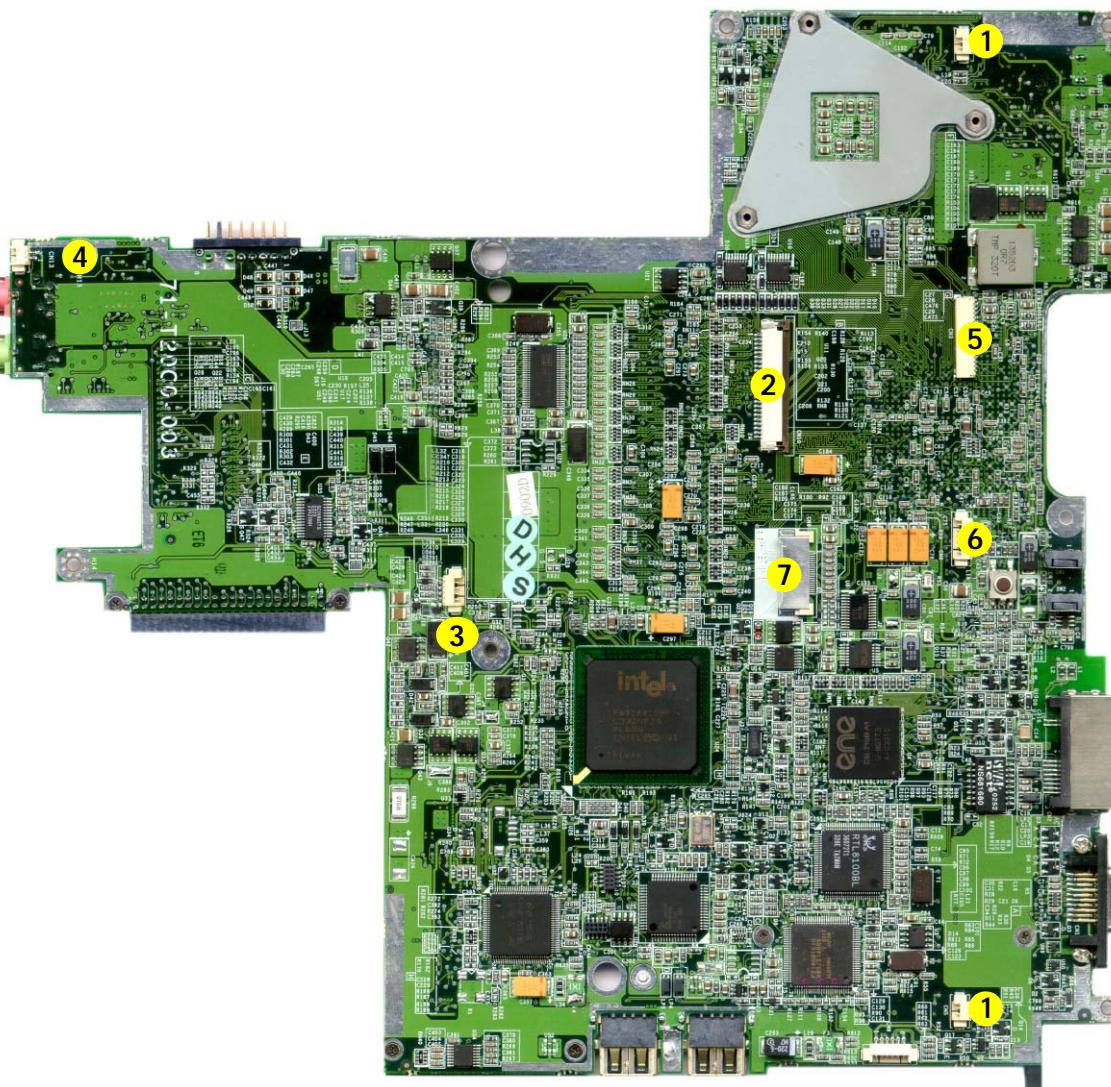


Figure 1 - 12  
T2X0C/T2X0D  
Mainboard Top  
Cable Connectors

1. Speakers (CN4/ CN5)
2. Keyboard (CN10)
3. Buttons (CN12)
4. Microphone (CN13)
5. LED Board (CN3)
6. Inverter (CN6)
7. LCD (CN9)

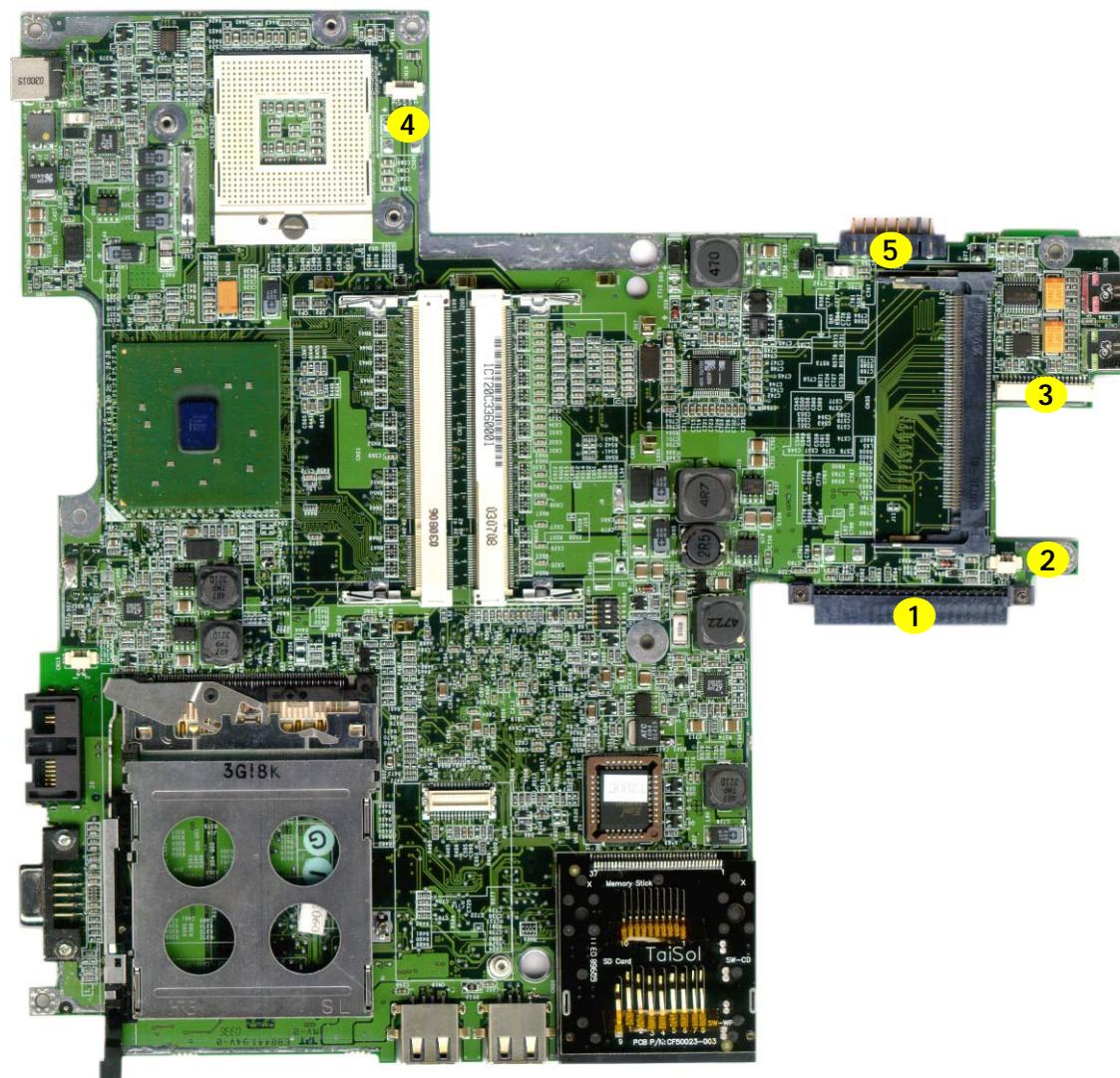
### Introduction

Figure 1 - 13  
T2X0C/T2X0D  
Mainboard Bottom  
Cable Connectors

1. Hard Disk (CN25)
2. CMOS Battery (CN31)
3. Hot\_Key Board(CN27)
4. CPU Fan (CN18)
5. Battery (CN24)

### T2X0C/T2X0D Mainboard Overview - Bottom

#### Cable Connectors



# T2X0V/T2X0H Mainboard Overview - Top

## Key Parts

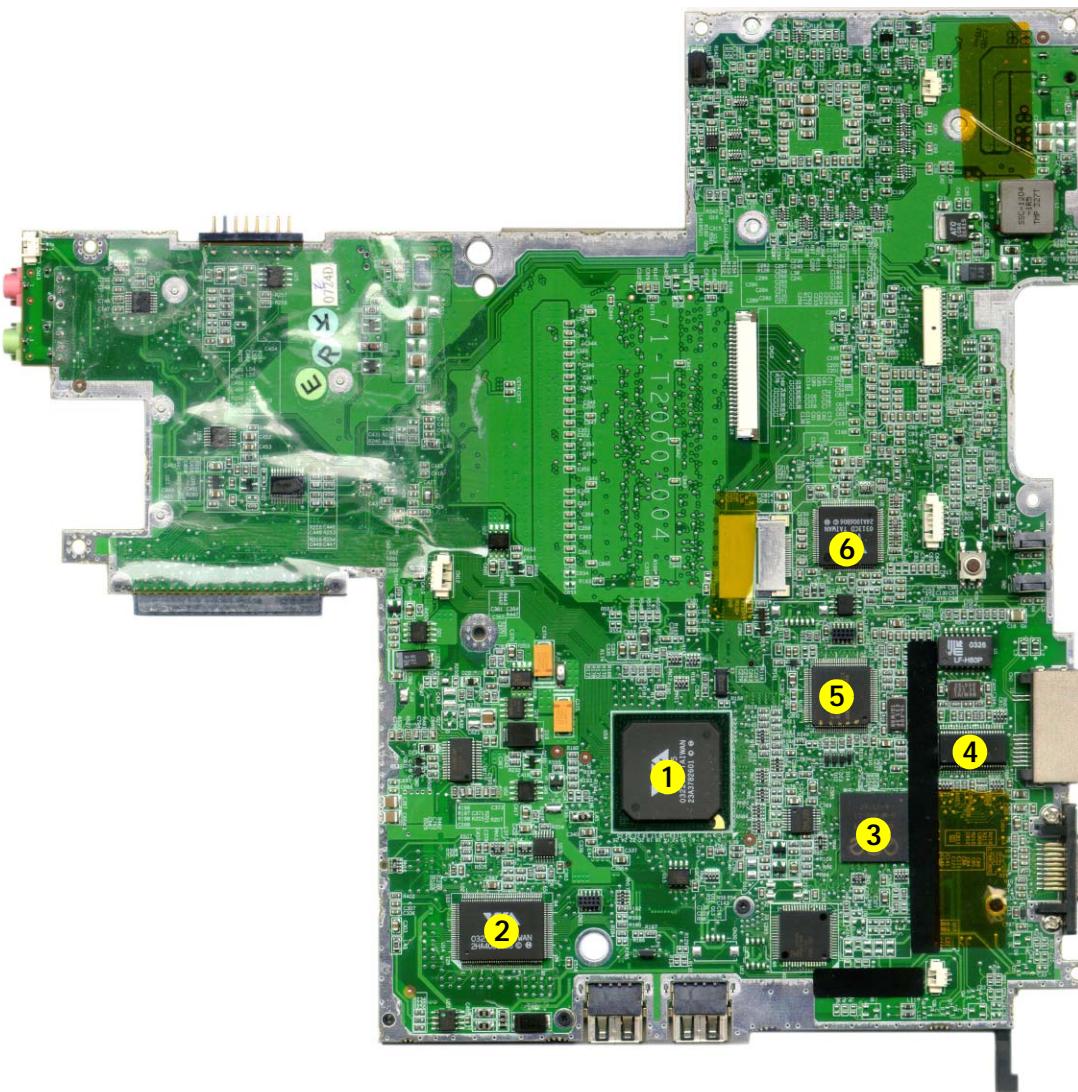


Figure 1 - 14  
T2X0V/T2X0H  
Mainboard  
Overview - Top  
Key Parts

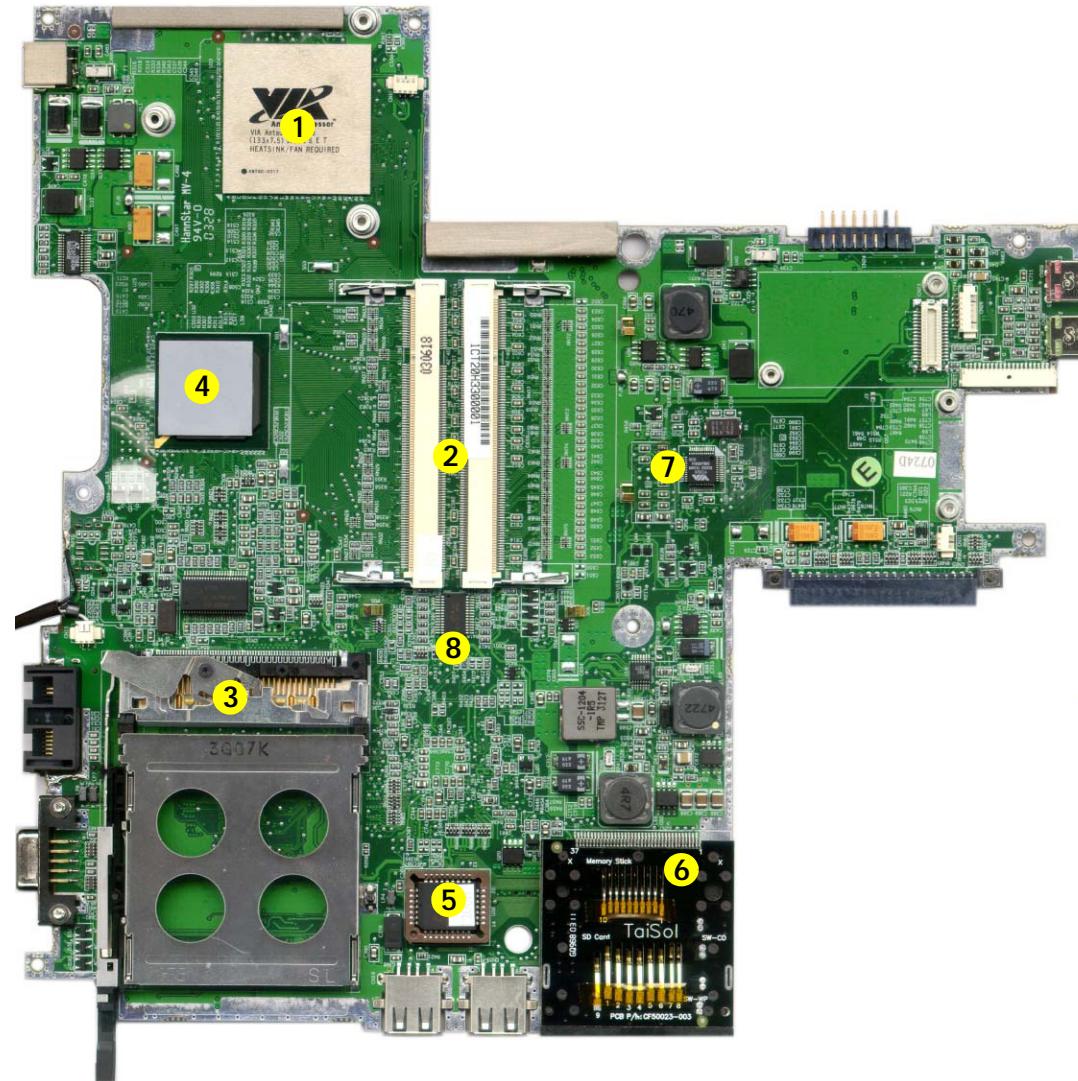
1. South Bridge  
VT-8235
2. Super I/O  
VT1211
3. PCMCIA ENE  
CB710/BGA
4. LAN/PHY  
VT6103
5. Micro-P H8/2140
6. LVDS VT1631  
Transmitter,  
Panel I/F

### Introduction

Figure 1 - 15  
T2X0V/T2X0H  
Mainboard  
Overview - Bottom  
Key Parts

1. VIA-C3  
Processor  
(surface  
mounted)
2. Memory Sockets
3. PCMCIA Module  
Slot
4. North Bridge  
VT-8623
5. Flash ROM  
BIOS
6. 4-in-1 Card  
Reader Module  
Socket
7. CODEC VT1616
8. Clock Generator  
W311

### T2X0V/T2X0H Mainboard Overview - Bottom Key Parts



## T2X0V/T2X0H Mainboard Overview - Top

### Cable Connectors

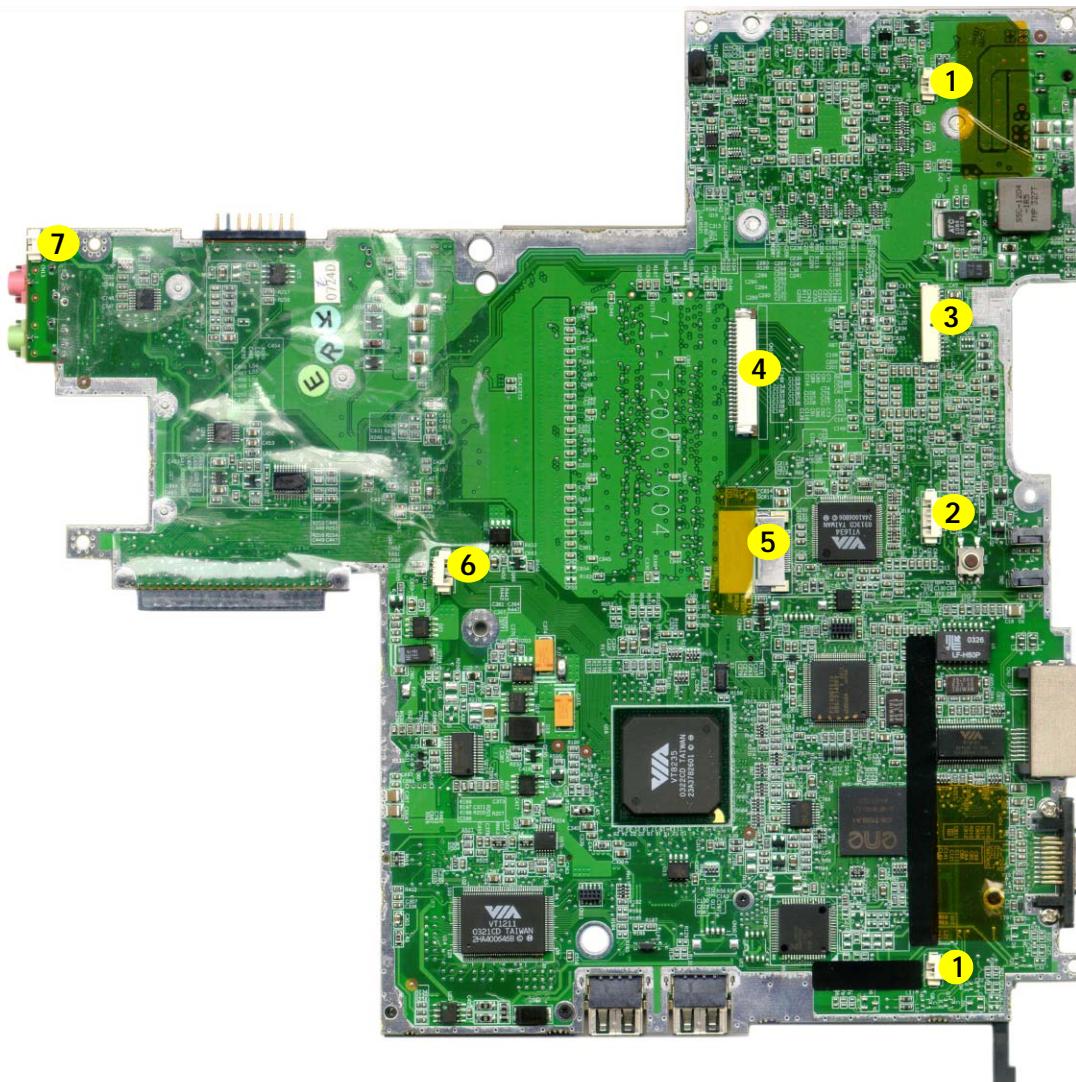


Figure 1 - 16  
T2X0V/T2X0H  
Mainboard Top  
Cable Connectors

1. Speakers (CN4/ CN5)
2. Inverter Board (CN3)
3. LED Board (CN6)
4. Keyboard (CN10)
5. LCD (CN9)
6. TouchPad(CN12)
7. Microphone (CN13)

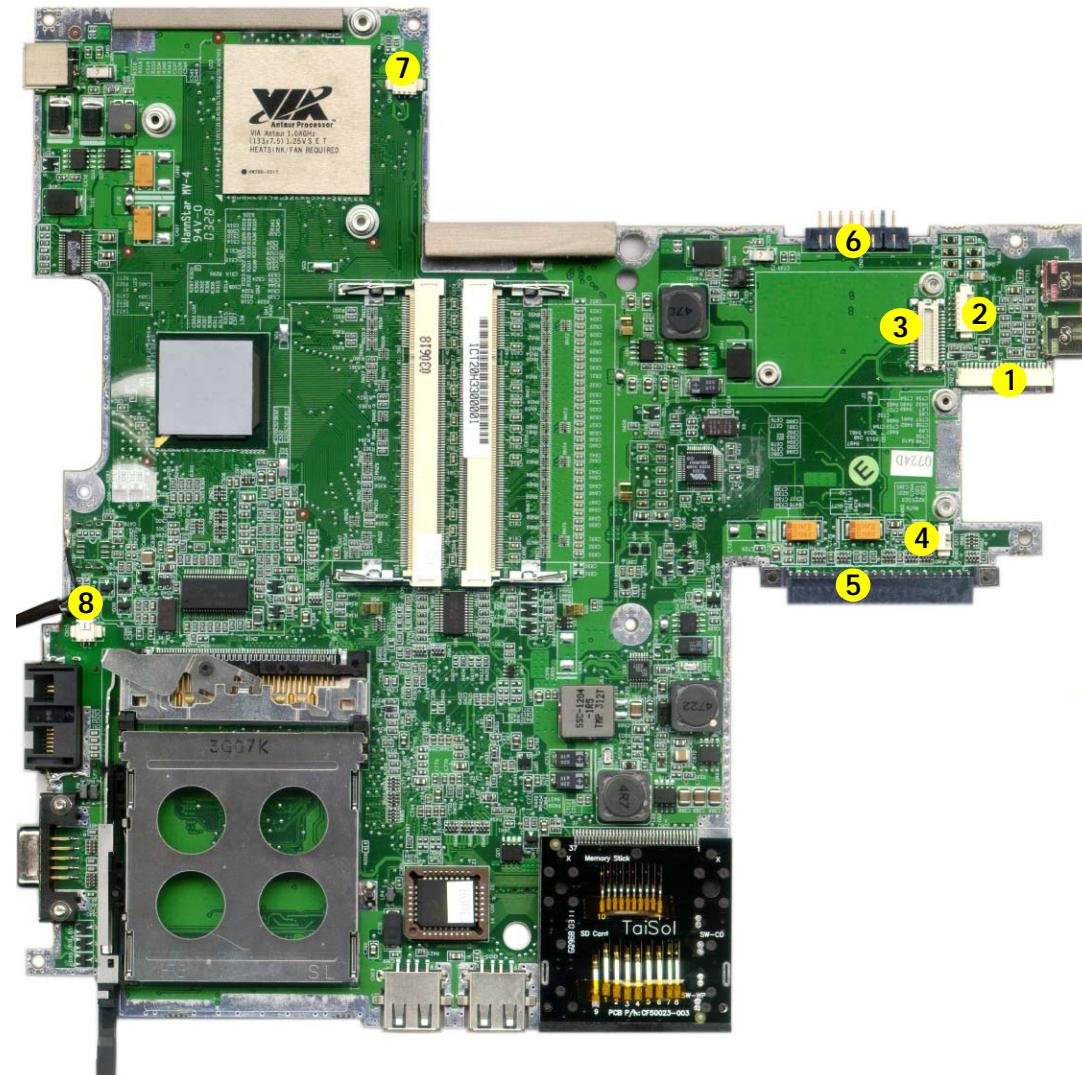
### Introduction

Figure 1 - 17  
T2X0V/T2X0H  
Mainboard Bottom  
Cable Connectors

1. Hot-Key Board (CN27)
2. Wireless LAN(CN26)
3. Modem (CN23)
4. CMOS Battery(CN31)
5. Hard Disk (CN25)
6. Battery (CN24)
7. CPU Fan (CN18)
8. Modem Cable (CN15)

### T2X0V/T2X0H Mainboard Overview - Bottom

#### Cable Connectors



# 2: Disassembly

## Overview

This chapter provides step-by-step instructions for disassembling parts and subsystems. When it comes to reassembly, reverse the procedures (unless otherwise indicated).

We suggest you completely review any procedure before you take the computer apart.

Procedures such as upgrading/replacing the RAM, CD device and hard disk are included in the User's Manual but are repeated here for your convenience.

To make the disassembly process easier each section may have a box in the page margin. Information contained under the figure # will give a synopsis of the sequence of procedures involved in the disassembly procedure. A box with a lists the relevant parts you will have after the disassembly process is complete. **Note:** The parts listed will be for the disassembly procedure listed ONLY, and not any previous disassembly step(s) required. Refer to the part list for the previous disassembly procedure. The amount of screws you should be left with will be listed here also.

A box with a will provide any possible helpful information. A box with a contains warnings.

An example of these types of boxes are shown in the sidebar.

### Model Differences

This Service Manual covers the disassembly procedures for both the T20X0C/D and T2X0V/H series Tabletnote computers. The model types differ very slightly in appearance (when viewed from the bottom), however the disassembly procedures are identical with the exception of the Wireless LAN and modem modules. The pictures used throughout the disassembly procedures are of the T200C model.



Information and Component Parts



Warning

## Disassembly

**NOTE:** All disassembly procedures assume that the system is turned **OFF**, and disconnected from any power supply, and that all peripheral cables are disconnected (including telephone lines and network cables).

### Maintenance Tools

The following tools are recommended when working on the computer:

- M3 Philips-head screwdriver
- M2.5 Philips-head screwdriver (magnetized)
- M2 Philips-head screwdriver
- Small flat-head screwdriver
- Pair of needle-nose pliers
- Anti-static wrist-strap

### Connections

Connections within the computer are one of four types:

Locking collar sockets for ribbon connectors

To release these connectors, use a small flat-head screwdriver to gently pry the locking collar away from its base. When replacing the connection, make sure the connector is oriented in the same way. The pin1 side is usually not indicated.

Pressure sockets for multi-wire connectors

To release this connector type, grasp it at its head and gently rock it from side to side as you pull it out. Do not pull on the wires themselves. When replacing the connection, do not try to force it. The socket only fits one way.

Pressure sockets for ribbon connectors

To release these connectors, use a small pair of needle-nose pliers to gently lift the connector away from its socket. When replacing the connection, make sure the connector is oriented in the same way. The pin1 side is usually not indicated.

Board-to-board or multi-pin sockets

To separate the boards, gently rock them from side to side as you pull them apart. If the connection is very tight, use a small flat-head screwdriver - use just enough force to start.

### Maintenance Precautions

The following precautions are a reminder. To avoid personal injury or damage to the computer while performing a removal and/or replacement job, take the following precautions:

1. **Don't drop it.** Perform your repairs and/or upgrades on a stable surface. If the computer falls, the case and other components could be damaged.
2. **Don't overheat it.** Note the proximity of any heating elements. Keep the computer out of direct sunlight.
3. **Avoid interference.** Note the proximity of any high capacity transformers, electric motors, and other strong magnetic fields. These can hinder proper performance and damage components and/or data. You should also monitor the position of magnetized tools (i.e. screwdrivers).
4. **Keep it dry.** This is an electrical appliance. If water or any other liquid gets into it, the computer could be badly damaged.
5. **Be careful with power.** Avoid accidental shocks, discharges or explosions.
  - Before removing or servicing any part from the computer, turn the computer off and detach any power supplies.
  - When you want to unplug the power cord or any cable/wire, be sure to disconnect it by the plug head. Do not pull on the wire.
6. **Peripherals – Turn off and detach any peripherals.**
7. **Beware of static discharge.** ICs, such as the CPU and main support chips, are vulnerable to static electricity. Before handling any part in the computer, discharge any static electricity inside the computer. When handling a printed circuit board, do not use gloves or other materials which allow static electricity buildup. We suggest that you use an anti-static wrist strap instead.
8. **Beware of corrosion.** As you perform your job, avoid touching any connector leads. Even the cleanest hands produce oils which can attract corrosive elements.
9. **Keep your work environment clean.** Tobacco smoke, dust or other air-born particulate matter is often attracted to charged surfaces, reducing performance.
10. **Keep track of the components.** When removing or replacing any part, be careful not to leave small parts, such as screws, loose inside the computer.

### Cleaning

Do not apply cleaner directly to the computer, use a soft clean cloth.

Do not use volatile (petroleum distillates) or abrasive cleaners on any part of the computer.



#### Power Safety Warning

Before you undertake any upgrade procedures, make sure that you have turned off the power, and disconnected all peripherals and cables (including telephone lines). It is advisable to also remove your battery in order to prevent accidentally turning the machine on.

## Disassembly

### Disassembly Steps

The following lists the disassembly steps, and on which page to find the related information. **PLEASE PERFORM THE DISASSEMBLY STEPS IN THE ORDER INDICATED.**

#### To remove the battery:

1. Remove the battery [page 2 - 5](#)

#### To remove the hard disk drive:

1. Remove the battery [page 2 - 5](#)
2. Remove the hard disk drive [page 2 - 6](#)

#### To remove the system memory (RAM):

1. Remove the battery [page 2 - 5](#)
2. Remove the system memory [page 2 - 7](#)

#### To remove the T2X0C/T2X0D WLAN module:

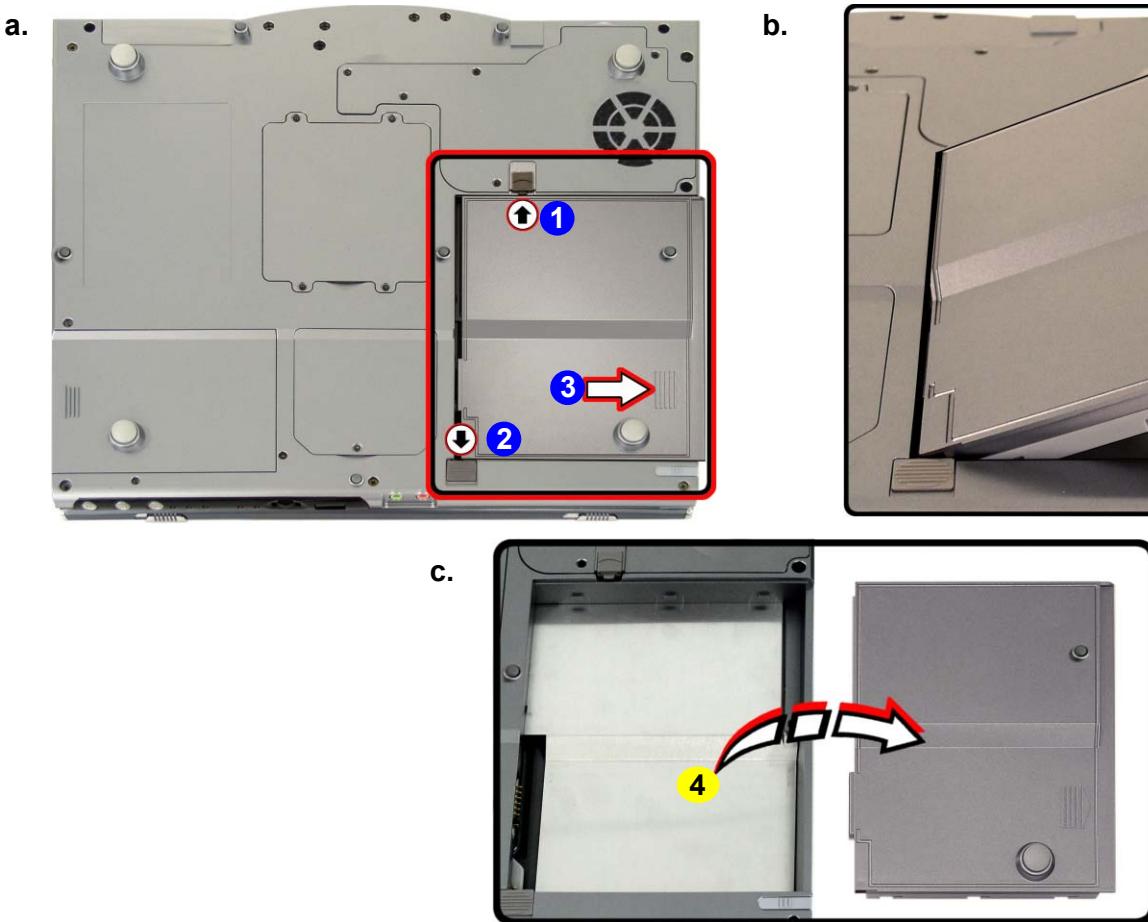
1. Remove the battery [page 2 - 5](#)
2. Remove the Intel WLAN module [page 2 - 8](#)

#### To remove the T2X0C/T2X0D processor:

1. Remove the battery [page 2 - 5](#)
2. Remove the CPU [page 2 - 9](#)

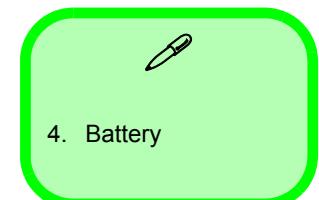
### Removing the Battery

1. Turn the computer **off**, and turn it over.
2. Locate the battery bay as highlighted in **Figure 2 - 1**.
3. Slide the battery lock in the direction of the arrow **1**.
4. Slide the battery lock in the direction of the arrow **2**, and hold it in place.
5. Slide the battery in the direction of the arrow **3**, then lift it up and out of the computer's battery bay.



**Figure 2 - 1**  
**Battery Removal**  
**Sequence**

- a. Move the battery locks open, then slide the battery in the direction of the arrow.
- b. Lift the battery up.
- c. Remove the battery.



## Disassembly

---

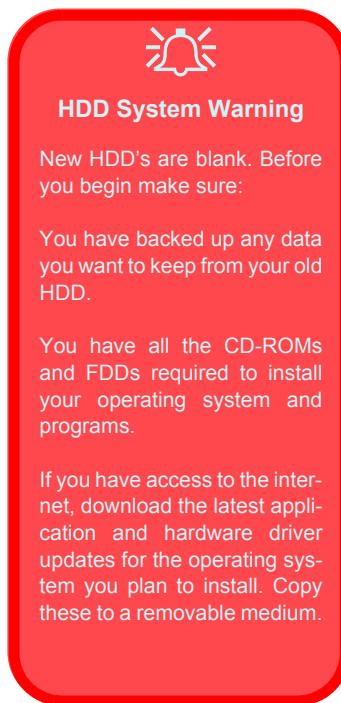
Figure 2 - 2

### Hard Disk Removal Sequence

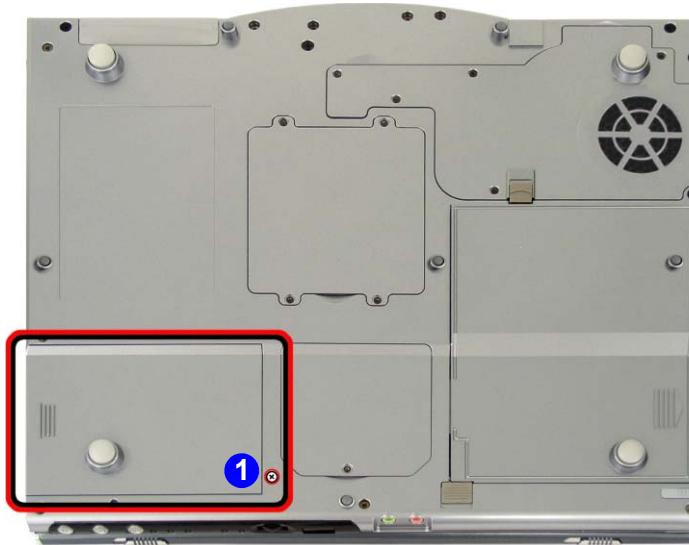
- a. Remove the screw.
- b. Slide the hard disk assembly in the direction of the arrow.
- c. Remove the hard disk assembly.
- d. Separate the hard disk from the case.

## Removing the Hard Disk

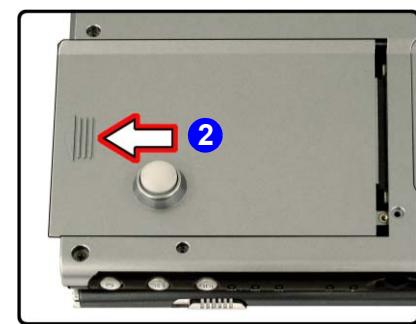
1. Turn the computer off, and turn it over and remove the battery ([page 2 - 5](#)).
2. Remove screw ① from the hard disk cover.
3. Slide the hard disk assembly in the direction of the arrow ②.
4. Lift the hard disk assembly out of the computer.
5. Remove screws ③ - ⑥ from the hard disk case ⑦ and remove the hard disk ⑧.



a.



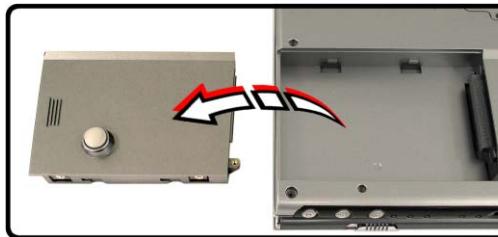
b.



d.

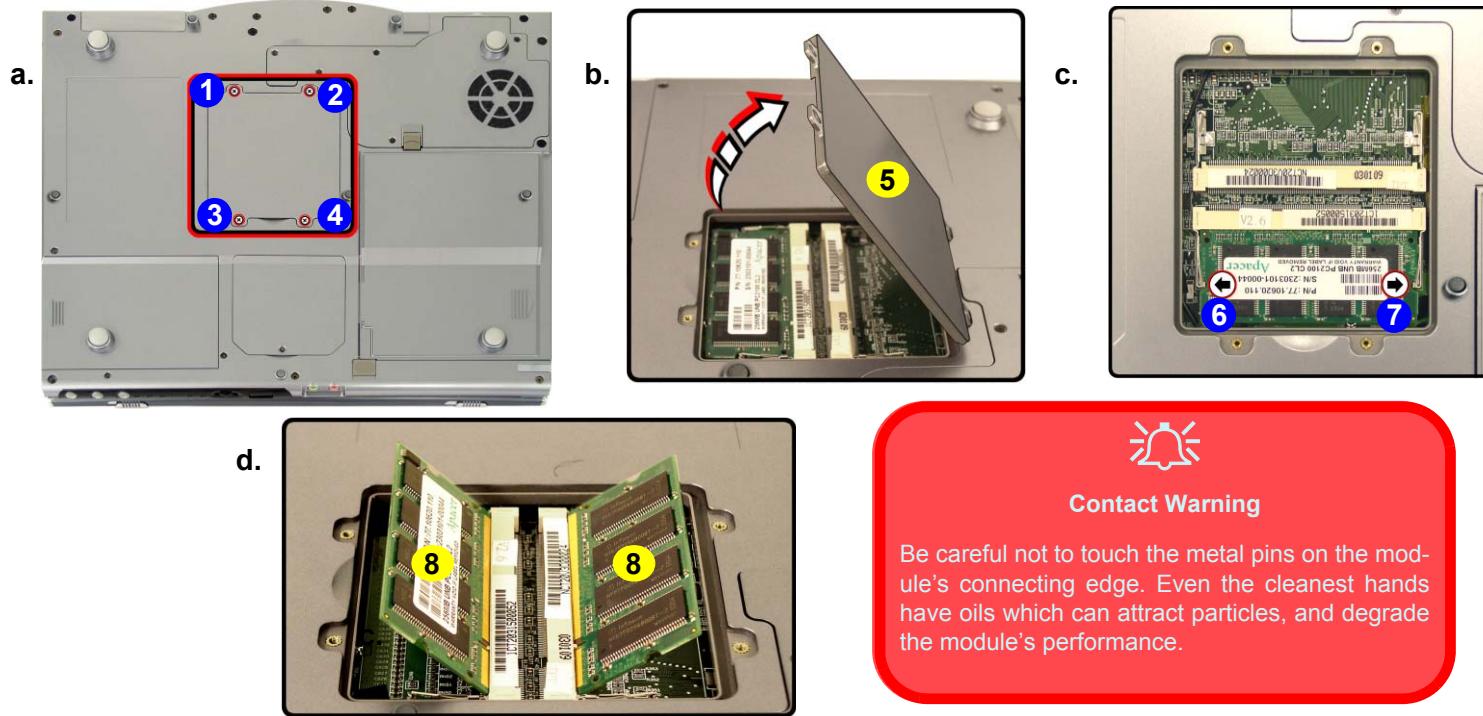


c.



## Removing the System Memory (RAM)

1. Turn the computer off, and remove the battery ([page 2 - 5](#)).
2. Remove screws **1** - **4** from the memory socket cover **5**, and remove the cover.
3. Gently pull the two release latches on the sides of the memory socket in the direction of the arrows (**6** & **7** in [Figure 2 - 3](#)).
4. The module **8** will pop-up, and you can remove it.
5. Insert a new module holding it at about a 30° angle and fit the connectors firmly into the memory slot.
6. The module's pin alignment will allow it to only fit one way. Make sure the module is seated as far into the slot as it will go. DO NOT FORCE the module; it should fit without much pressure.
7. Press the module in and down towards the mainboard until the slot levers click into place to secure the module.
8. Replace the memory socket cover and the **4** screws.
9. Restart the computer to allow the BIOS to register the new memory configuration as it starts up.



*Figure 2 - 3  
RAM Removal  
Sequence*

- a. Remove the RAM cover screws.
- b. Lift up the RAM cover.
- c. Pull the release latches and allow the module to pop-up.
- d. Remove the RAM module.



### Contact Warning

Be careful not to touch the metal pins on the module's connecting edge. Even the cleanest hands have oils which can attract particles, and degrade the module's performance.



- 5. RAM Cover
- 8. RAM Module
- 4 Screws

## Disassembly

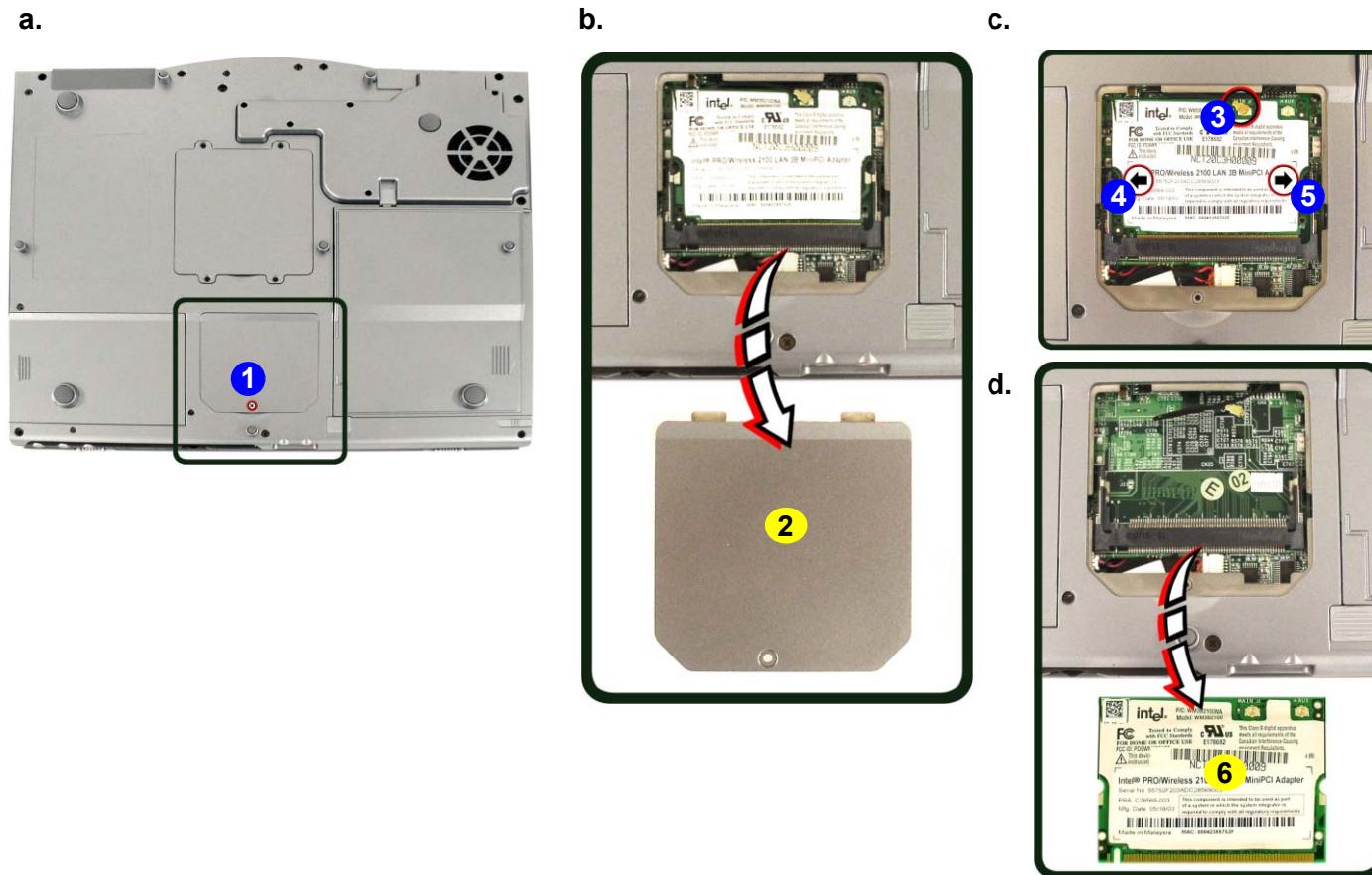
*Figure 2 - 4*

**T2X0C/T2X0D Intel  
WLAN Module  
Removal Sequence**

- a. Remove the screw.
- b. Remove the cover.
- c. Release the antenna cable, and pull the latches to release the WLAN module.
- d. Remove the module.

## Removing the Intel WLAN Module (T2X0C/T2X0D Only)

1. Turn the computer off, and remove the battery ([page 2 - 5](#)).
2. Remove screw **1** from the WLAN module cover, and remove the cover **2**.
3. Release the antenna cable **3**.
4. Gently pull the two release latches on the sides of the WLAN socket in the direction of the arrows (**4** & **5**) in [Figure 2 - 4](#).
5. The module **6** will pop-up, and you can remove it.



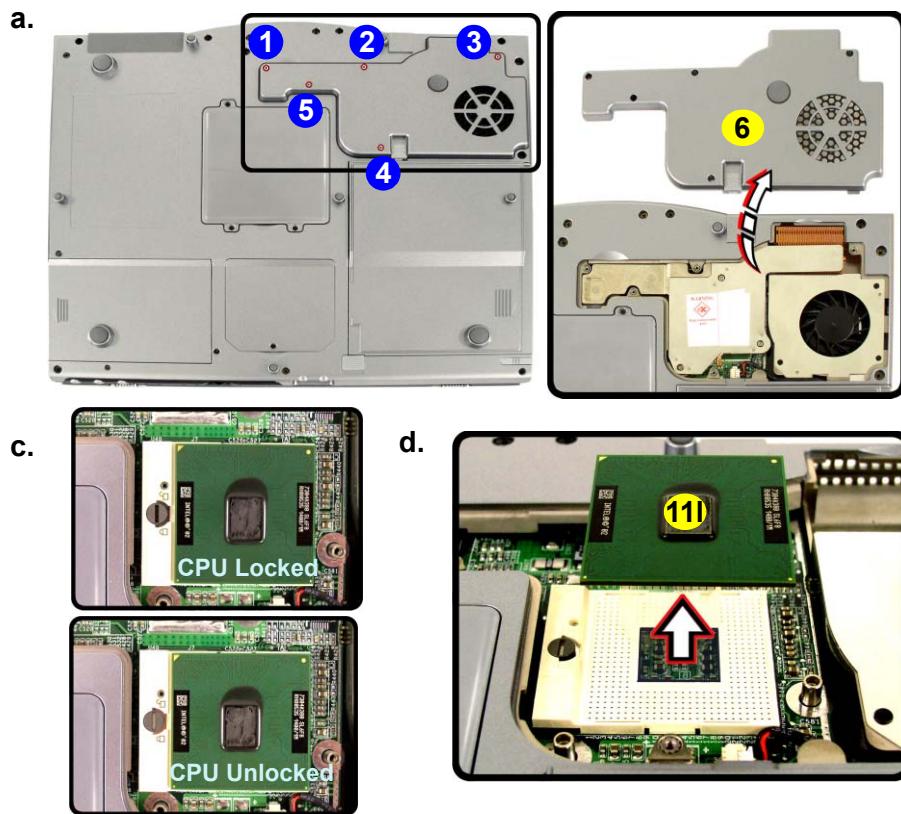
- 2. WLAN Cover
- 6. WLAN Module
- 1 Screw

## 2 - 8 Removing the Intel WLAN Module (T2X0C/T2X0D Only)

## Removing the Processor (T2X0C/T2X0D Only)

You can only upgrade the T2X0C/T2X0D model's processor (the T2X0V/T2X0H model's processor is surface mounted and cannot be removed).

1. Turn the computer off, and remove the battery ([page 2 - 5](#)).
2. Remove screws **1** - **5** from the CPU cover, and remove the cover **6**.
3. Remove screws **7** - **9** from the heat sink, and remove the heat sink **10**.
4. Use a small screwdriver to release the lock holding down the CPU by giving it a counter-clockwise turn towards the open symbol.
5. Remove the CPU **11**.



*Figure 2 - 5  
T2X0C/T2X0D  
Processor Removal  
Sequence*

- a. Remove the screws and the CPU cover.
- b. Remove the screws and the heat sink.
- c. Unlock the CPU.
- d. Remove the CPU.



### Caution

The heat sink, and CPU area in general, contains parts which are subject to high temperatures - Please allow the area time to cool before removing these parts.



- 6. CPU Cover
- 10. Heat Sink
- 11. CPU
- 8 Screws

## Disassembly

---

# Appendix A:Part Lists

This appendix breaks down the computer's construction into a series of illustrations. The component part numbers are indicated in the tables opposite the drawings.

**Note:** This section indicates the *manufacturer's* part numbers. Your organization may use a different system, so be sure to cross-check any relevant documentation.

**Note:** Some assemblies may have parts in common (especially screws). However, the part lists DO NOT indicate the total number of duplicated parts used.

**Note:** Be sure to check any update notices. The parts shown in these illustrations are appropriate for the system at the time of publication. Over the product life, some parts may be improved or re-configured, resulting in *new* part numbers.

## Part List Illustration Location

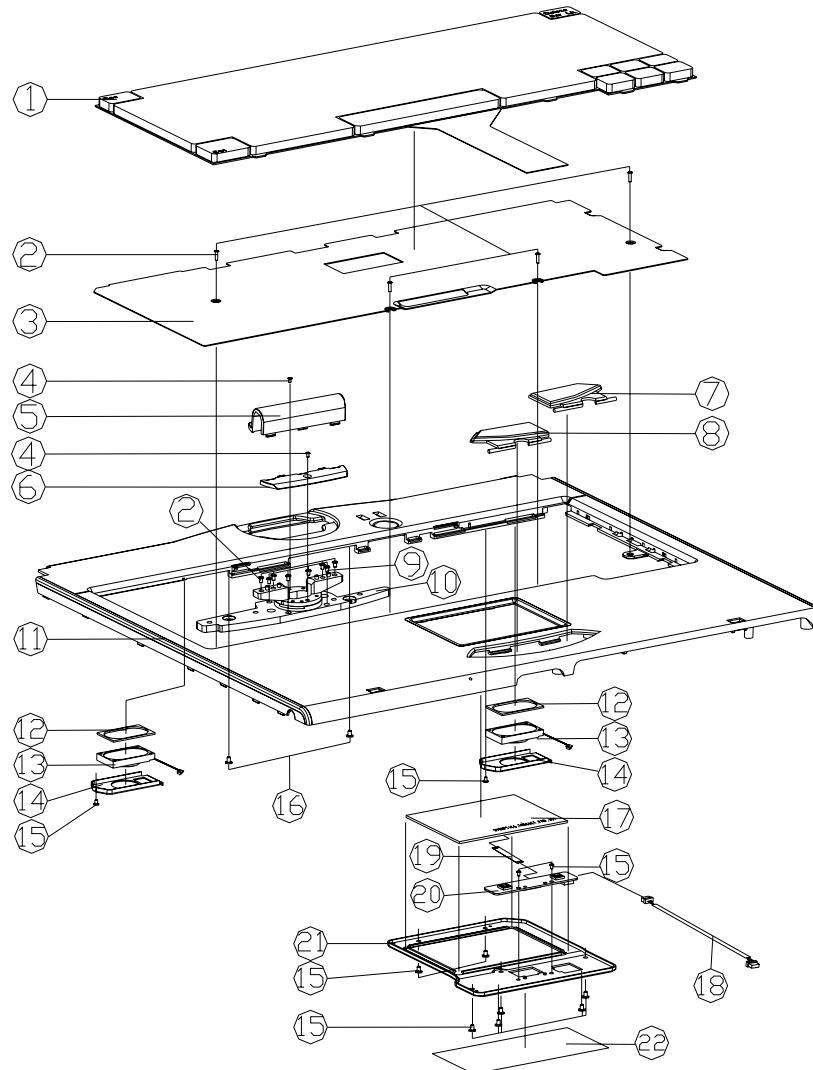
The following table indicates where to find the appropriate part list illustration.

Part	T200C	T210C	T200V	T210V
Top	<a href="#">page A - 2</a>	<a href="#">page A - 6</a>	<a href="#">page A - 10</a>	<a href="#">page A - 14</a>
Bottom	<a href="#">page A - 3</a>	<a href="#">page A - 7</a>	<a href="#">page A - 11</a>	<a href="#">page A - 15</a>
14.1" LCD	<a href="#">page A - 4</a>	<a href="#">page A - 8</a>	<a href="#">page A - 12</a>	<a href="#">page A - 16</a>
Hard Disk Drive	<a href="#">page A - 5</a>	<a href="#">page A - 9</a>	<a href="#">page A - 13</a>	<a href="#">page A - 17</a>

Table A- 1  
Part Lists

**Part Lists****Top (T200C)**

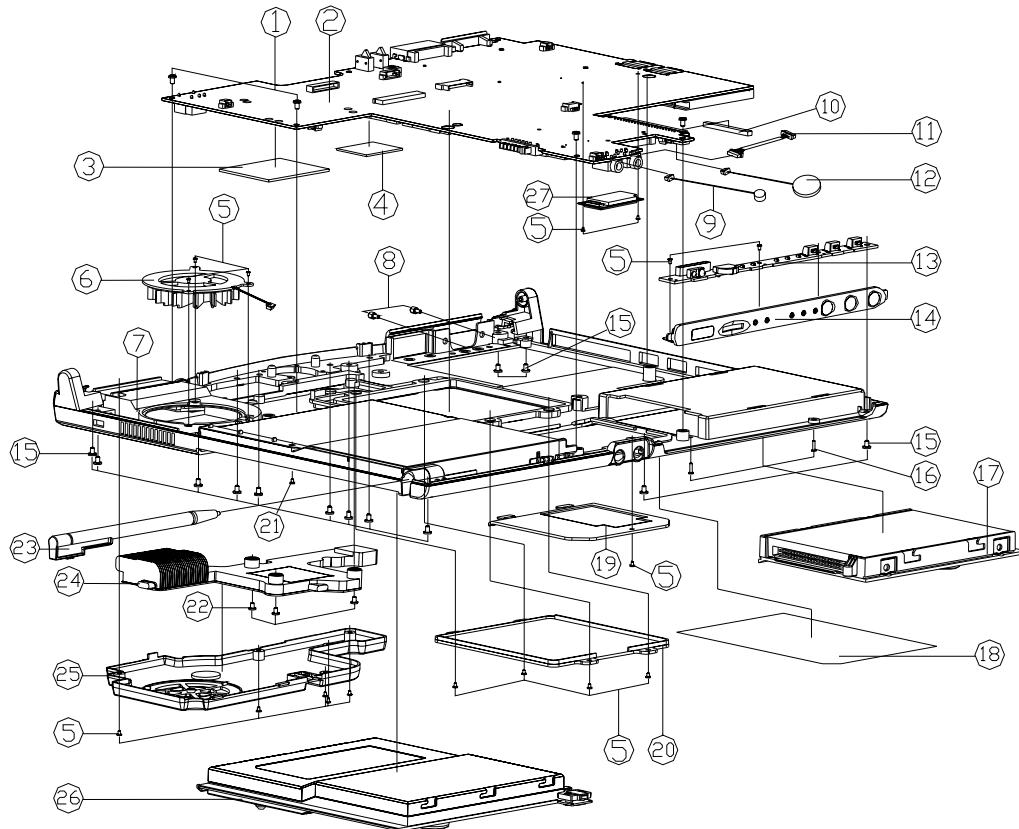
*Figure A-1*  
**Top**  
**(T200C)**



ITEM	PART	NAME	PART NO	REMARK
1	KEYBOARD		80-T2008-700	
2	SCREW M2.5*6L K1 NI ICT NY		35-B1125-6RB	
3	KEYBOARD SUPPORTER BRACKET MODULE T200V		33-T2007-102	
4	SCREW M2*3L K1 BK/Z ICT NY		35-B6120-3RE	
5	HINGE ROTATION COVER(PC+ABS) T200V		42-T200Y-022	
6	HINGE ROTATION COVER(PC+ABS) T200V		42-T200Y-012	
7	TRACK PAD BUTTON (R)PC+ABS T200V		42-T2002-052	
8	TRACK PAD BUTTON (L)PC+ABS T200V		42-T2002-062	
9	SCREW M2.5*6L B NI ICT NY		35-41125-6R0	
10	HINGE BASE MODULE.Z2 T200V		33-T200Y-102	
11	TOP CASE MODULE T200V		39-T2002-012	
12	SPEAKER RUBBER,SILICONE T200V		47-T200T-020	
13	SPEAKER 25*15*5.7mm IW 4 FG25N15A		23-32510-400A	
14	SPEAKER BRACKET,SUS T200V		33-T200T-010	
15	SCREW M2*2.5L K1 NI ICT NY		35-B1120-2R5	
16	SCREW M2*3L K1 BK/Z ICT NY		35-B6125-3RA	
17	TOUCH PAD SYNAPTICS TM4PPG351-I		49-42002-010	
18	WIRE CABLE FOR TOUCH PAD TO MB 4P 120V		43-T2002-011	
19	FFC CABLE FOR TOUCH PAD 12P T200V		43-T2002-020	
20	TRACK PAD BOARD		77-T200M-003	
21	TRACK PAD BRACKET MODULE T200V		33-T2002-100	
22	MYLAR FOR TRACK PAD BRACKET		47-T2002-010	

**A - 2 Top (T200C)**

## Bottom (T200C)

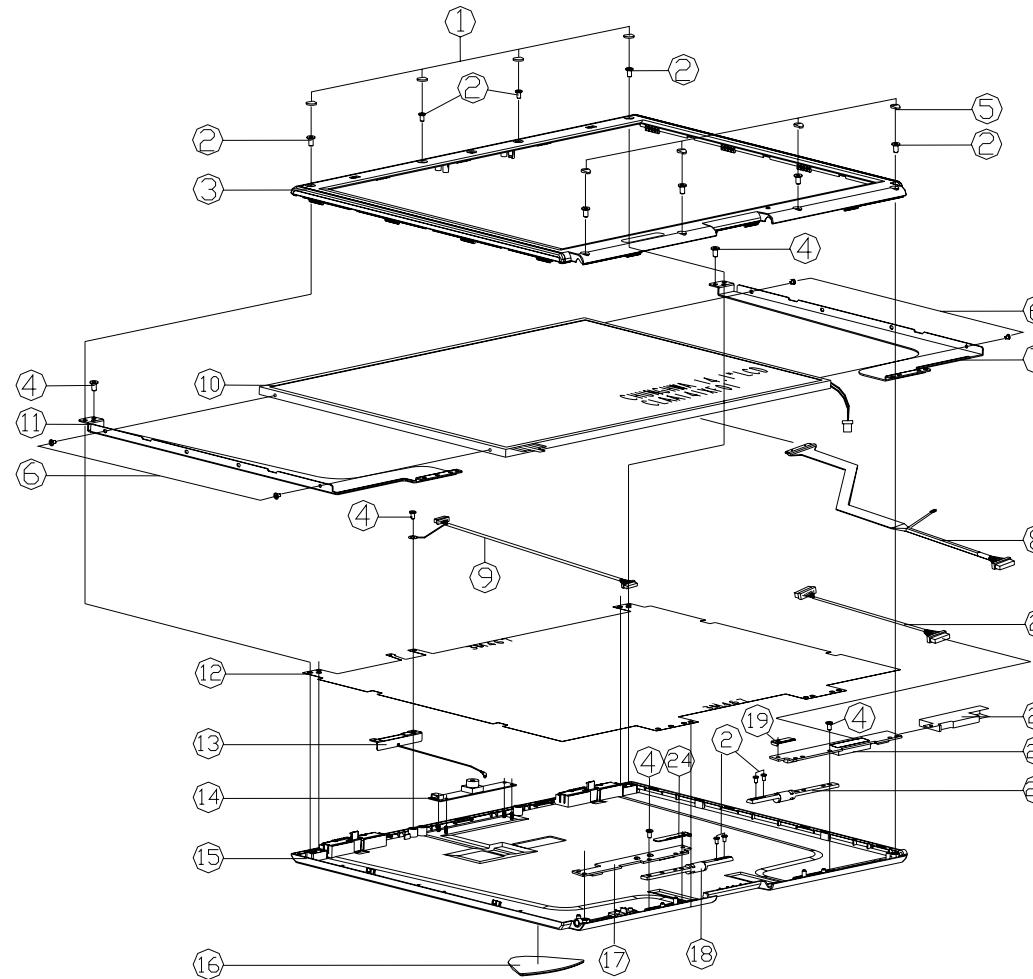


ITEM	PART NAME	PART NO	REMARK
1	SCREW M2.5*6L B NI ICT NY	35-41125-6R0	
2	MAIN BOARD	77-T20C0-002	
3	CPU THERMAL PAD SILICONE T200V	47-T200P-010	
4	NORTH BRIDGE THERMAL PAD SILICONE T200V	47-T200P-020	
5	SCREW M2*3L K1 BK/Z ICT NY	35-B6120-3RE	
6	FAN 45mm 5v 0.2A BS5005L2B APower	23-A4511-462A	
7	BOTTOM COVER MODULE T200V	39-T2003-012	
8	SCREW #4*8.3 NI-PZ NY FPC VGA CONN	34-W7003-010	
9	MIC 6M 3V 22KFG-60A W/CABLE T200V	23-E0603-222	
10	GASKET(45*5*8)	47-00190-456	
11	WIRE CABLE FOR HOT KEY TO M/B ZIP T200V	43-T2002-031	
12	BAT 20MM 3V 230MAH W/CABLE 56MM CR	23-22015-P80	
13	HOTKEY BOARD	77-T20CS-001	
14	HOTKEY COVER MODULE T200V	42-T2004-102	
15	SCREW M2.5*9L K1 BNI ICT NY	35-B9125-9RA	
16	SCREW M2*10L K1 BNI ICT NY	35-B9120-10A	
17	W/D HDD ASSY T200V	79-T2001-010	REFERENCE ASSY NO (99-1e003-040)
18	PRODUCT LABEL T200C	45-T20C3-010	
19	MINIPCI COVER,PC+ABS T200V	42-T2003-011	
20	RAM COVER,PC+ABS T200V	42-T2003-022	
21	SCREW M2.5*3L K1 BK/Z ICT NY	35-B6125-3RA	
22	SCREW M2.5*4L K1 BNI ICT NY	35-B9125-4RA	
23	PEN MODULE T200V	42-T2000-101	
24	CPU HEATSINK MODULE T200V	31-T20CN-100	
25	CPU COVER MODULE T200C	42-T20CS-100	
26	BAT(P7) S L 36AH GLW/MOLI (6 CELLS)	87-T200S-44C	
26	BAT(P7) S L 36AH GLW/MOLI (8 CELLS)	87-T200S-44C-A	
26	BAT(P7) S L 43SP 14BV 36AH ?? MOLCEL	87-T200S-49C	
26	BAT(P7) S L 43SP 14BV 36AH ?? MOLCEL	87-T200S-49C-A	
27	MDC MODEM MODULE CX8000 ?? W/EMI	76-32200-004	

Figure A - 2  
Bottom  
(T200C)

**Part Lists****14.1" LCD (T200C)**

*Figure A - 3  
14.1" LCD  
(T200C)*



ITEM	PART	NAME	PART NO	REMARK
1	LCD FRONT UP RUBBER SILICONE T200V		47-T2001-030	
2	SCREW M2.5x7L K1 BNI ICT NY		35-B9125-7RA	
3	LCD FRONT COVER MODULE T200V		39-T2001-012	
4	SCREW M2.5x6L K1 NI ICT NY		35-B1125-6RA	
5	LCD FRONT DOWN RUBBER SILICONE T200V		47-T2001-020	
6	SCREW M2.5x15L K1 NI ICT NY		35-B1120-2R5	
7	LCD BRACKET(R) SUS T200V		33-T2001-052	
8	COAXIAL CABLE FDR LCD (CPD) T200V		43-T2001-012	
9	COAXIAL CABLE FDR LCD (AU) T200V		43-T2001-021	
10	WIRE CABLE FOR LED BOARD 16P T200V		43-T200S-022	
10	LCD (PT) CLEANING(7)-TOUCH PANEL MODULE 120W		50-J2252-C00-1	
10	LCD (AU) 1400x1024-7-TOUCH PANEL MODULE 120W		50-J2287-G08-1	
11	LCD BRACKET(L) SUS T200V		33-T2001-062	
12	LCD SHIELDING AU T200V		33-T2001-050	
13	ANTENNA 2.4GHz PIFA FOR WLAN D01:13m		23-742R4-A90	
14	VIDEO CAMERA CM3030, 30K Pixels Resolu		88-D40C0-410	OPTION
15	LCD BACK COVER MODULE T200V		39-T2001-022	
16	LOGO BASE MODULE T200V		42-T2001-10	
17	LED BOARD		77-T20C4-001	
18	LCD HINGE (L) SUM22 T200V		33-T2001-022	
19	LCD INVERTER BRACKET(X7 T200V		33-T2001-080	
20	WIRE CABLE FOR INVERTER 6P T200V		43-T200S-012	
21	INVERTER MYLAR FRI T200V		40-T200S-022	
22	INVERTER BOARD		77-T20CR-001	
23	LCD HINGE (R) SUM22 T200V		33-T2001-032	
24	LCD LED BRACKET,K7 T200V		33-T2001-070	

## Hard Disk Drive (T200C)

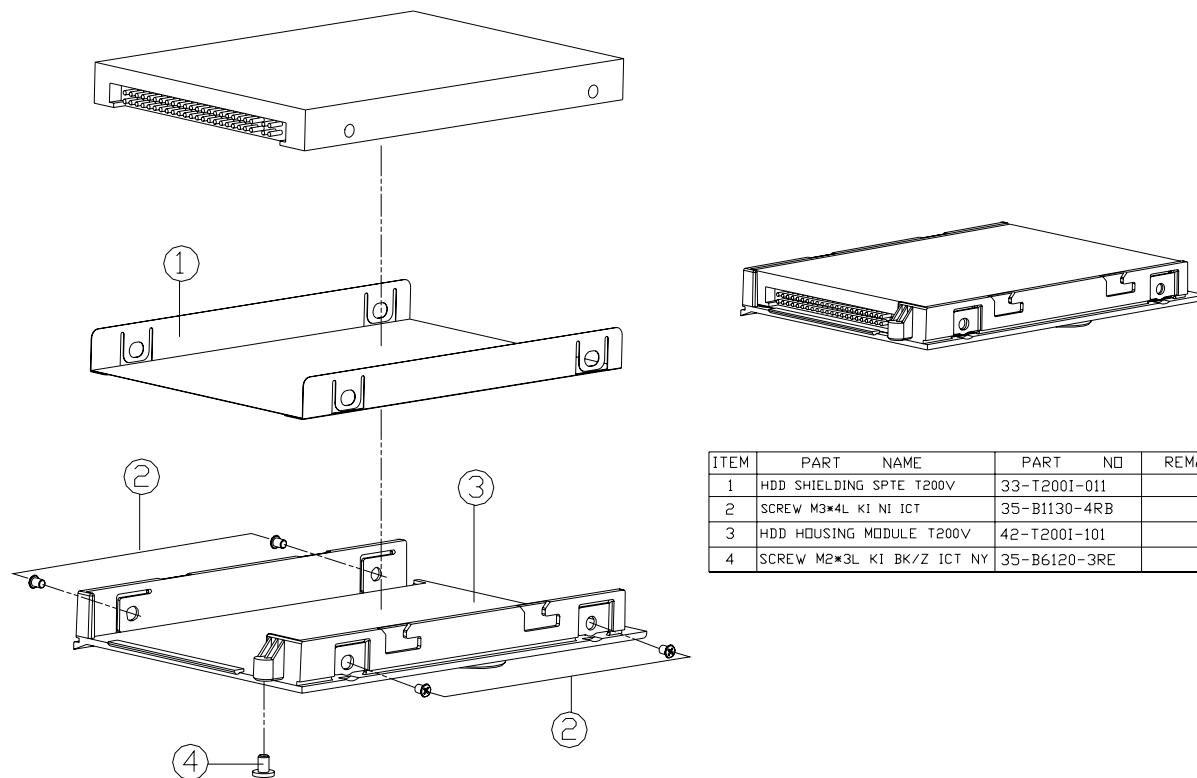
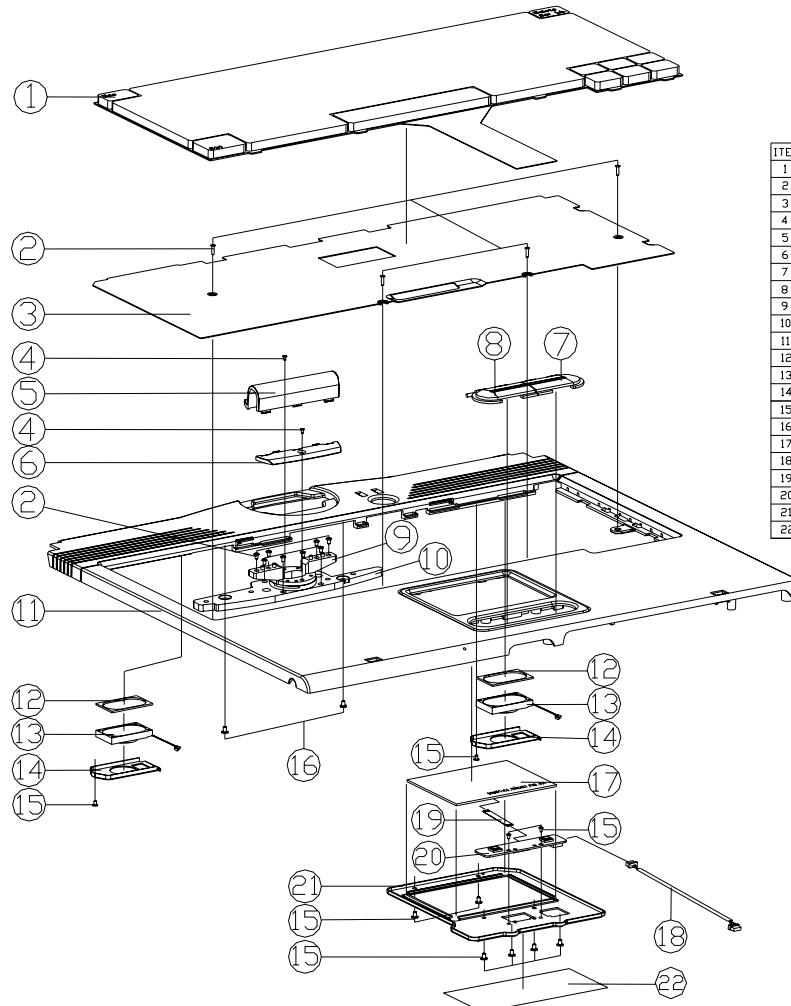


Figure A-4  
Hard Disk Drive  
(T200C)

ITEM	PART NAME	PART NO	REMARK
1	HDD SHIELDING SPTE T200V	33-T200I-011	
2	SCREW M3*4L KI NI ICT	35-B1130-4RB	
3	HDD HOUSING MODULE T200V	42-T200I-101	
4	SCREW M2*3L KI BK/Z ICT NY	35-B6120-3RE	

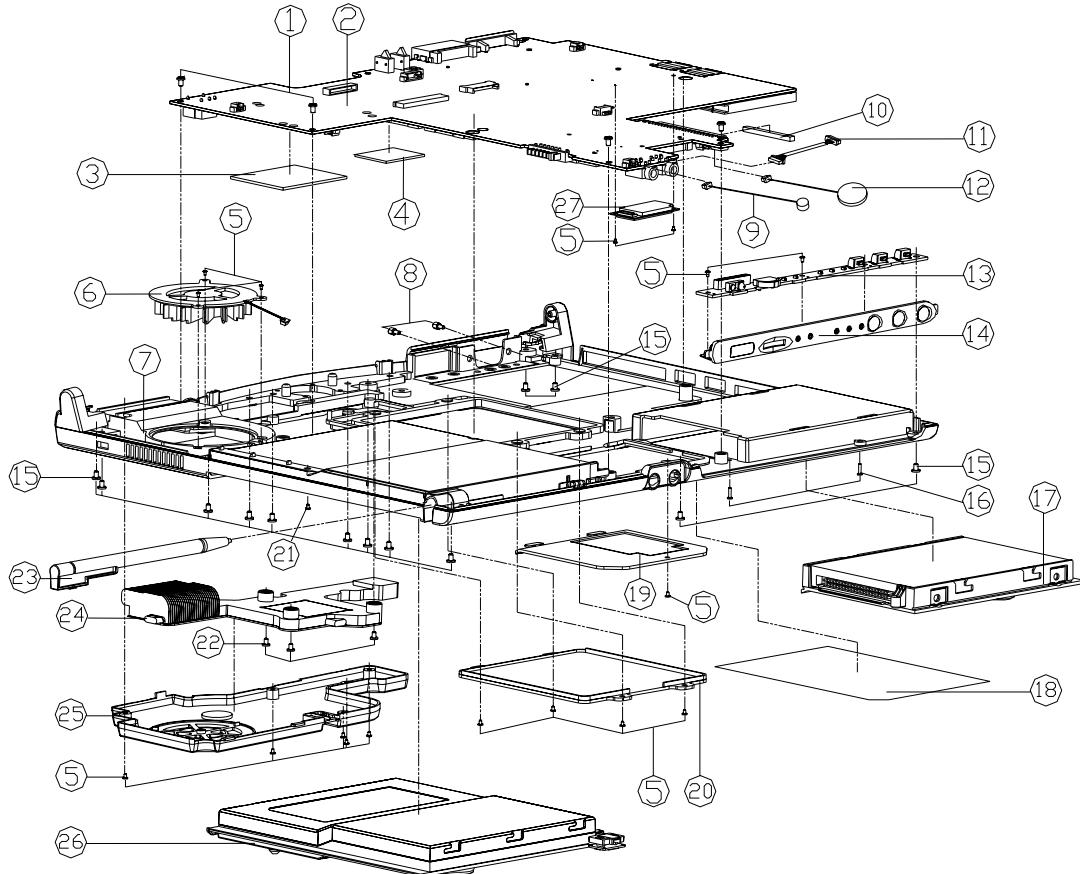
**Part Lists****Top (T210C)**

*Figure A-5*  
**Top**  
**(T210C)**



ITEM	PART	NAME	PART NO	REMARK
1	KEY BOARD		80-T2008-7G0	
2	SCREW M2.5*6L K1 NI ICT NY		35-B1125-6RB	
3	KEYBOARD SUPPORTER BRACKET MODULE T200V		33-T2007-102	
4	SCREW M2*3.8 K1 BK/Z ICT NY		35-B6120-3RE	
5	HINGE ROTATION COVER(B)PC+ABS 1200V		42-T21VY-020	
6	HINGE ROTATION COVER(D)PC+ABS 1200V		42-T21VY-010	
7	TRACKET PAD BUTTON (R)PC+ABS 1200V		42-T21V2-021	
8	TRACKET PAD BUTTON (L)PC+ABS 1200V		42-T21V2-031	
9	SCREW M2.5*6L B NI ICT NY		35-41125-6R0	
10	HINGE BASE MODULE Z2 T200V		33-T200Y-103	
11	TOP CASE MODULE T201V		39-T21V2-011	
12	SPEAKER RUBBER,SILICONE 1200V		47-T200T-020	
13	SPEAKER 25*15*5.7mm IV 4 FG25N5A		23-32510-400A	
14	SPEAKER BRACKET,SUS 1200V		33-T200T-010	
15	SCREW M2*2.5L K1 NI ICT NY		35-B1120-2R5	
16	SCREW M2.5*3L K1 BK/Z ICT NY		35-B6125-3RA	
17	TOUCH PAD SYNAPTICS TMA1PBG051-I		49-42002-010	
18	WIRE CABLE FOR TOUCH PAD 10 W/3 AP 12W		43-T2002-011	
19	WTC CABLE FOR TOUCH PAD 12P T200V		43-T2002-020	
20	TRACKET PAD BOARD		77-T200M-003-1	
21	TRACKET PAD BRACKET MODULE T201V		33-T21V2-100	
22	Mylar for trackpad bracket		47-T2002-010	

## Bottom (T210C)

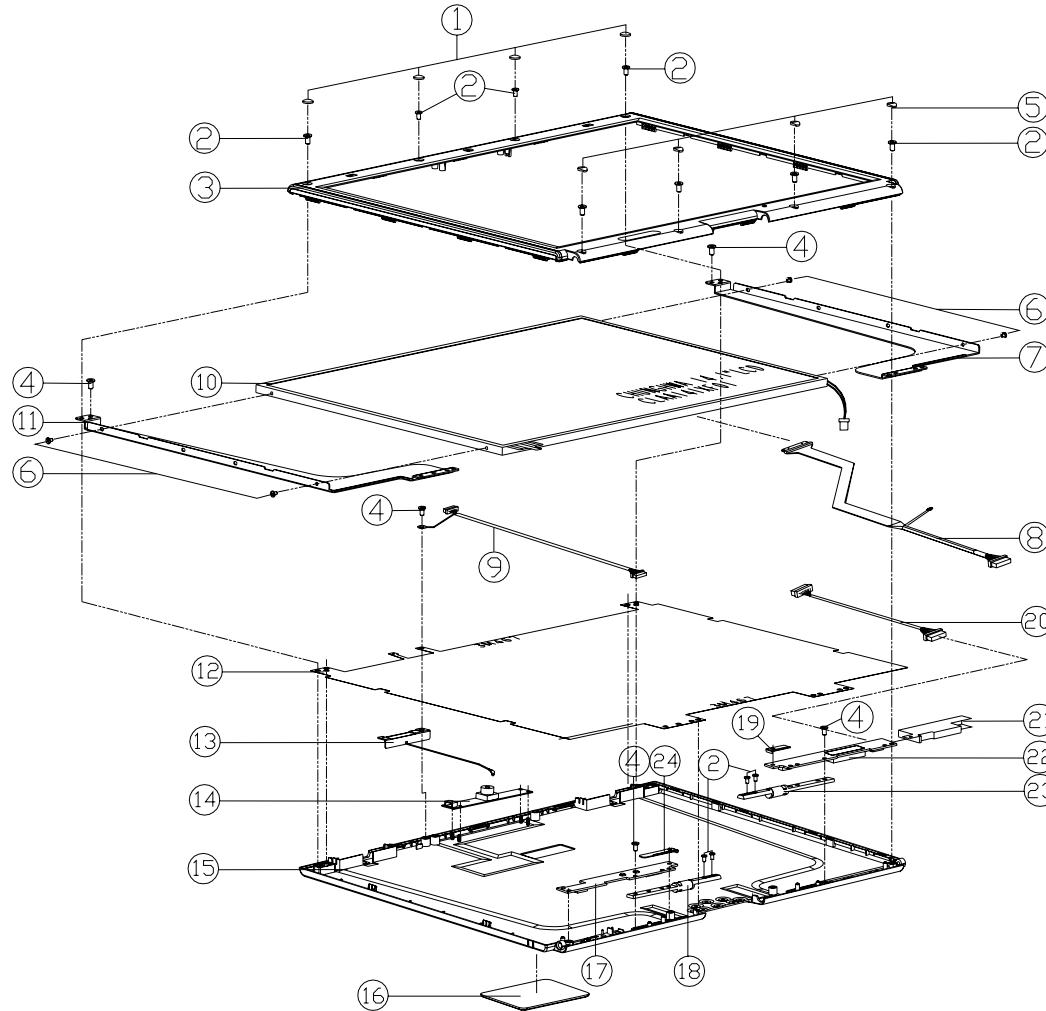


ITEM	PART NAME	PART NO	REMARK
1	SCREW M2.5*6L B NI ICT NY	35-41125-6R0	
2	MAIN BOARD	77-T20C0-002	
3	CPU THERMAL PAD SILICONE T200V	47-T200P-010	
4	NORTH BRIDGE THERMAL PAD SILICONE T200V	47-T200P-020	
5	SCREW M2*3L K1 BK/Z ICT NY	35-B6120-3RE	
6	FAN 45mm 5v 0.8A 85000L2B ADPWR	23-A4511-462A	
7	BOTTOM COVER MODULE T210V	39-T21V3-011	
8	SCREW M4*8L NI-PZ NY FOR VGA CDDN	34-W7003-010	
9	MIC 6MM 3V 22KFDM-60A W/CABLE T200V	23-E0603-222	
10	GASKET C40L5W*8H	47-00190-409	
11	WIRE CABLE FOR HOT KEY TO M/B RJP T200V	43-T2002-031	
12	BAT. 20MM 3V 230MAH W.CABLE 56MM CR	23-22015-P80	
13	HDKEY BOARD	77-T20CS-001	
14	HDKEY ASSY T200V	79-T2004-001	
15	SCREW M2.5*9L K1 BNI ICT NY	35-B9125-9RA	
16	SCREW M2*10L K1 BNI ICT NY	35-B9120-10A	
17	W/D HD ASSY T210V	79-T21V1-010	Reference Assy No. C99-T21V3-5409
18	PRODUCT LABEL T210C	45-T21C3-010	
19	MINIPC COVER.PC+ABS T200V	42-T2003-011	
20	RAM COVER.PC+ABS T200V	42-T21V3-020	
21	SCREW M2.5*3L K1 BK/Z ICT NY	35-B6125-3RA	
22	SCREW M2.5*4L K1 BNI ICT NY	35-B9125-4RA	
23	PEN MODULE T210V	42-T21V0-100	
24	CPU HEATPIPE MODULE.AL T200C	31-T20CN-100	
25	CPU COVER MODULE T210C	42-T21CS-101	
26	BAT(P)? S L 3.6AH GLW/MOLI (6 CELLS)	87-T200S-44C	
26	BAT(P)? S L 3.6AH GLW/MOLI (6 CELLS)	87-T200S-44C-A	
26	BAT(P)? S L 3.6AH ?? MOLIC CELLS	87-T200S-49C	
26	BAT(P)? S L 452P 14.8V 3.6AH ?? MOLICEL	87-T200S-49C-A	
27	MDC MODEM MODULE CX800 ?? W/EMI	76-32200-004	

Figure A-6  
Bottom  
(T210C)

**Part Lists****14.1" LCD (T210C)**

*Figure A-7*  
**14.1" LCD  
(T210C)**



ITEM	PART NO.	NAME	PART NO.	REMARK
1	47-T2001-030	LCD FRONT UP RUBBER SILICONE T200V		
2	35-B9125-7RA	SCREW M2.5#L K1 BN1 ICT NY		
3	39-T21V1-011	LCD FRONT COVER MODULE T200V		
4	35-B1125-6RB	SCREW M2.5#L K1 NI ICT NY		
5	47-T2001-020	LCD FRONT DOWN RUBBER SILICONE T200V		
6	35-B1120-2R5	SCREW M2.5#L K1 NI ICT NY		
7	33-T2001-052	LCD BRACKET(L) SUS T200V		
8	43-T2001-012	COAXIAL CABLE FOR LCD <CPD> T200V		
9	43-T2001-021	COAXIAL CABLE FOR LCD & INVERTER T200V		
10	43-T2005-023	WIRE CABLE FOR LCD BOARD 16P T200V		
11	50-J2252-C00-1	LCD OPT GLASS(FOR TOUCH PANEL) MODULE T20W		
12	50-J2287-G08-1	LCD (FOR GLASS+TOUCH PANEL) MODULE T20W		
13	33-T2001-062	LCD BRACKET(R) SUS T200V		
14	33-T2001-050	LCD SHIELDING AL T200V		
15	23-742R4-A90	ANTENNA 2.4GHz PIFA FOR WLAN 00113m		
16	88-D40C0-410	VIDEO CAMERA CMOS(30, 30K Pixels Resolution)		OPTION
17	39-T21V1-021	LCD BACK COVER MODULE T200V		
18	42-T21V1-100	LED BOARD		
19	77-T20C4-001	LCD HINGE (L) SUM22 T200V		
20	33-T2001-023	LCD HINGE (R) SUM22 T200V		
21	43-T2005-013	WIRE CABLE FOR INVERTER 6P T200V		
22	40-T200S-022	INVERTER MYLAR FRI T200V		
23	77-T20CR-001	INVERTER BOARD		
24	33-T2001-033	LCD HINGE (R) SUM22 T200V		
	33-T2001-071	LCD LED BRACKET,K7 T200V		

## Hard Disk Drive (T210C)

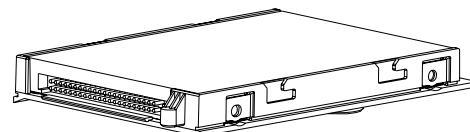
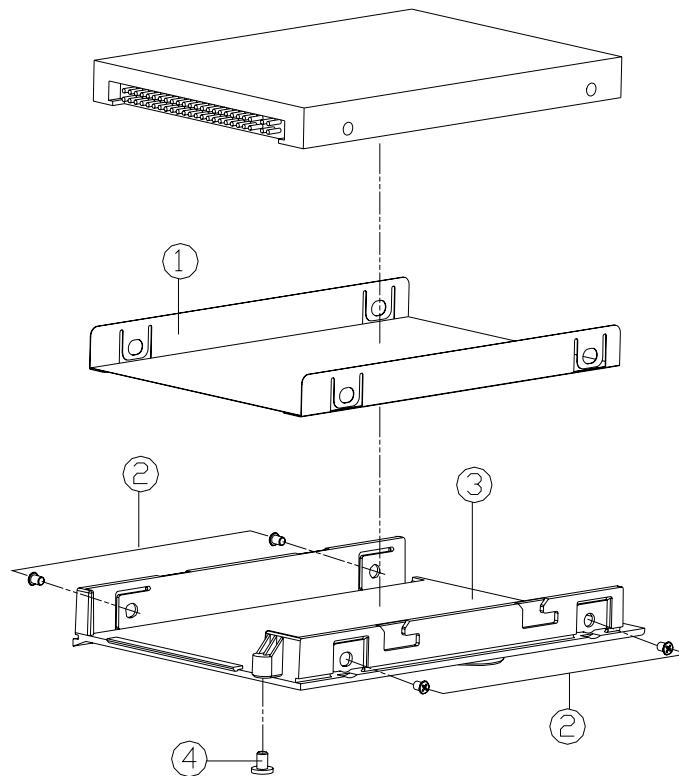
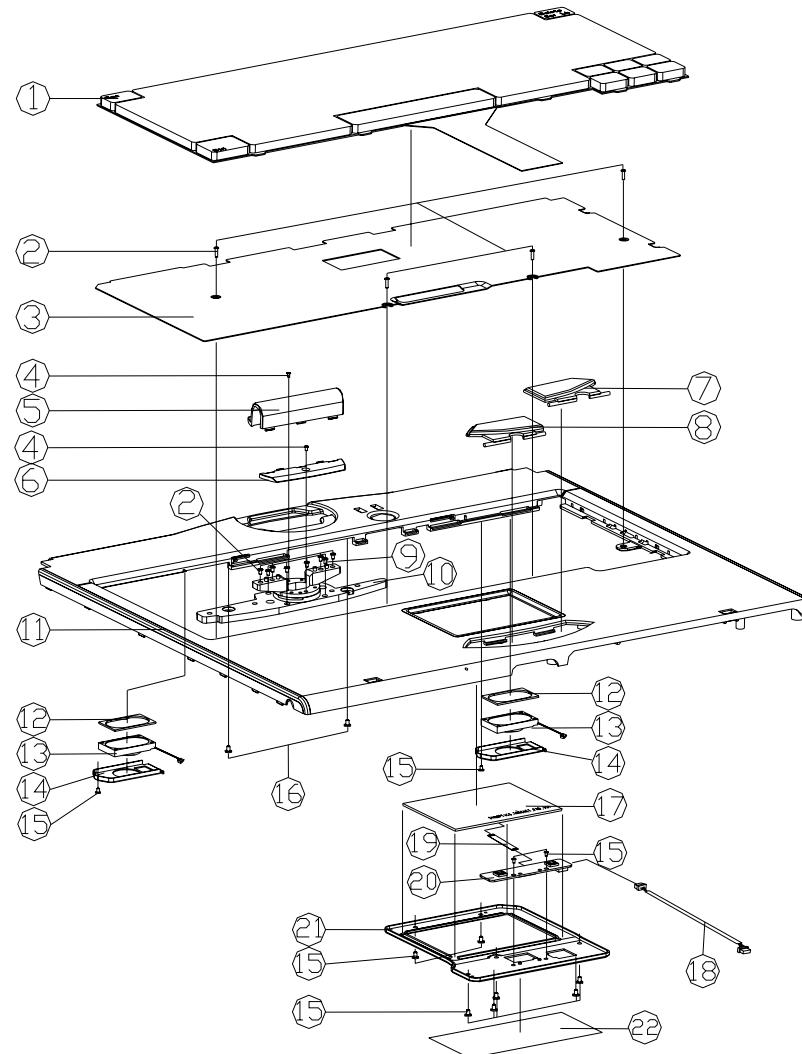


Figure A-8  
Hard Disk Drive  
(T210C)

ITEM	PART NAME	PART NO	REMARK
1	HDD SHIELDING SPTE T200V	33-T200I-012	
2	SCREW M2*4L KI NI ICT	35-B1130-4RB	
3	HDD HOUSING MODULE T210V	42-T21VI-100	
4	SCREW M2*3L KI BK/Z ICT NY	35-B6120-3RE	

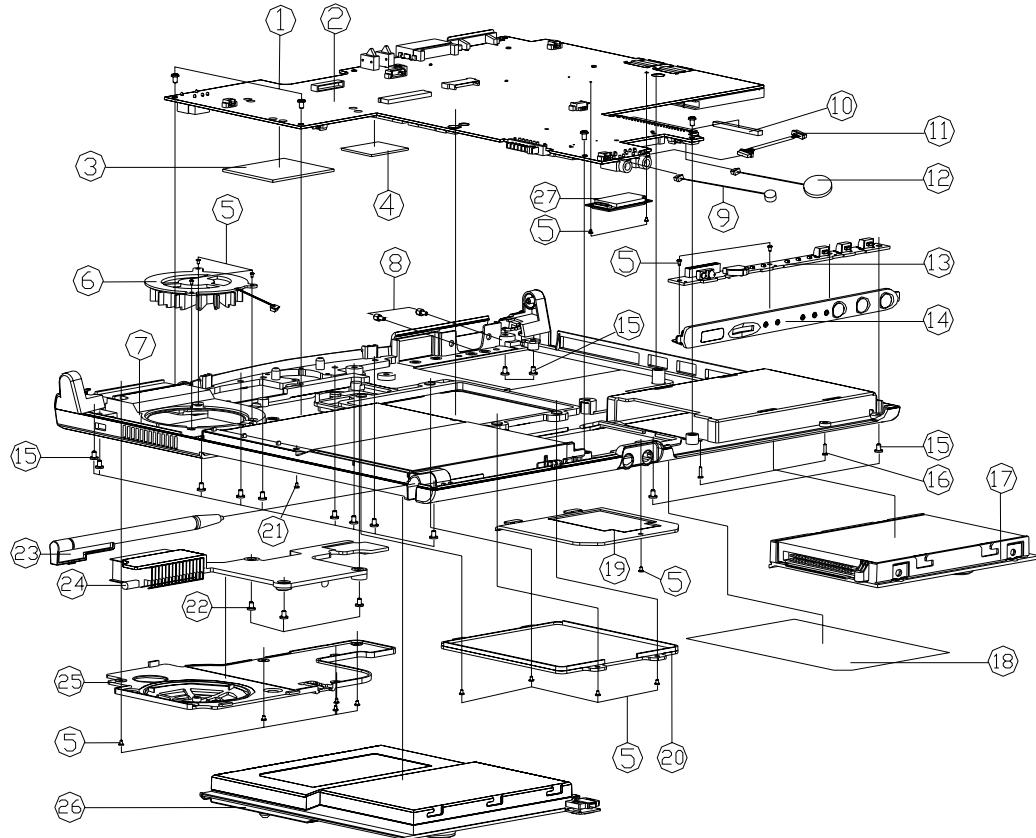
**Part Lists****Top (T200V)**

*Figure A-9*  
**Top**  
**(T200V)**



ITEM	PART NAME	PART NO	REMARK
1	KEYBOARD	80-T2008-7G0	
2	SCREW M2.5*6L K1 NI ICT NY	35-B1125-6RB	
3	KEYBOARD SUPPORTER BRACKET MODULE T200V	33-T2007-102	
4	SCREW M2*3L K1 BK/Z ICT NY	35-B6120-3RE	
5	HINGE ROTATION COVER(B)PC+ABS T200V	42-T200Y-022	
6	HINGE ROTATION COVER(F)PC+ABS T200V	42-T200Y-012	
7	TRACKET PAD BUTTON (R)PC+ABS T200V	42-T2002-052	
8	TRACKET PAD BUTTON (L)PC+ABS T200V	42-T2002-062	
9	SCREW M2.5*6L B N ICT NY	35-41125-6R0	
10	HINGE BASE MODULE T200V	33-T200Y-102	
11	TOP CASE MODULE T200V	39-T2002-012	
12	SPEAKER RUBBER,SILICONE T200V	47-T2001-020	
13	SPEAKER 25*15*5.7mm 1W 4 FG25N1SA	23-32510-400A	
14	SPEAKER BRACKET,SUS T200V	33-T2007-010	
15	SCREW M2*2.5L K1 NI ICT NY	35-B1120-2R5	
16	SCREW M2.5*3L K1 BK/Z ICT NY	35-B6125-3RA	
17	TOUCH PAD SYNAPTICS TM41PDG35I-1	49-42002-010	
18	WIRE CABLE FOR TOUCH PAD TO M/S 4P 120V	43-T2002-011	
19	FFC CABLE FOR TOUCH PAD TO T200V	43-T2002-020	
20	TRACKET PAD BOARD	77-T200M-002	
21	TRACKET PAD BRACKET MODULE T200V	33-T2002-100	
22	NYLAR FOR TRACKET PAD BRACKET	47-T2002-010	

## Bottom (T200V)



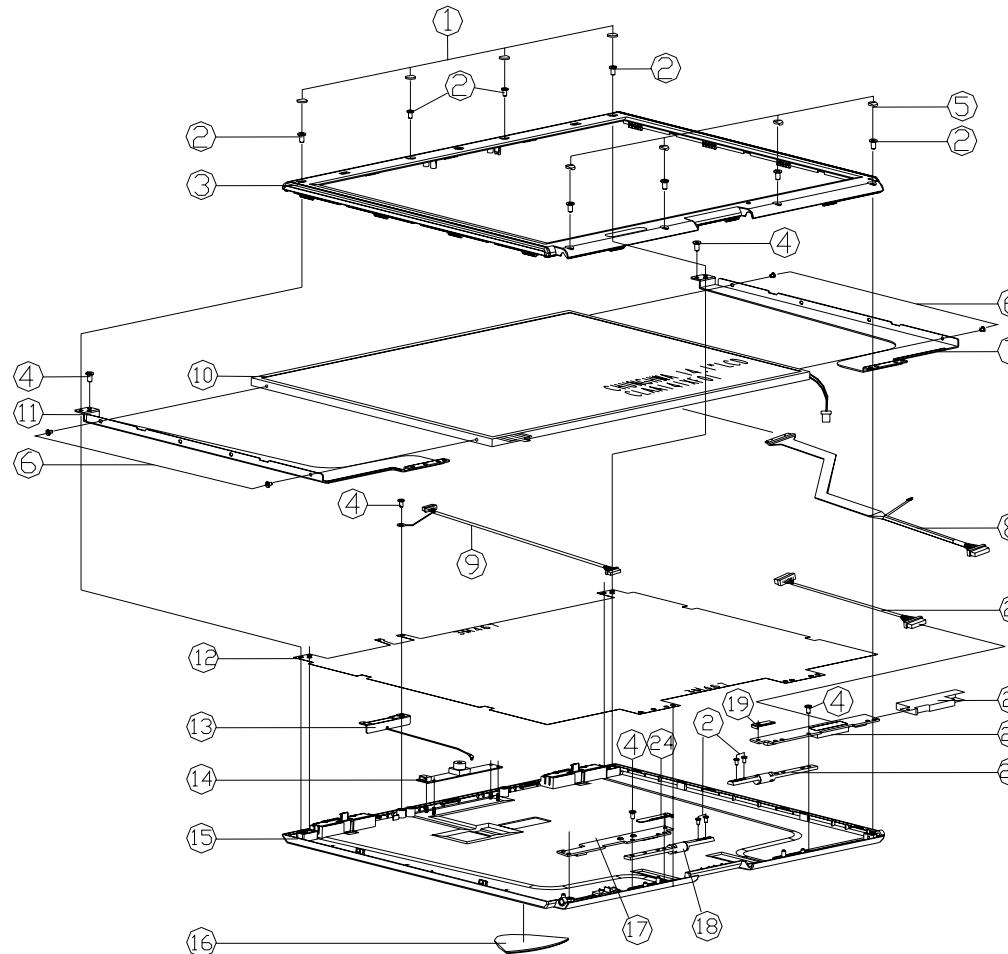
ITEM	PART NAME	PART NO	REMARK
1	SCREW M2.5*6L B NI ICT NY	35-41125-6R0	
2	MAIN BOARD	77-T2000-003	
3	CPU THERMAL PAD SILICONE T200V	47-T200P-010	
4	NORTH BRIDGE THERMAL PAD SILICONE T200V	47-T200P-020	
5	SCREW M2*3L K1 BK/Z ICT NY	35-B6120-3RE	
6	FAN 45.5mm 5v 0.2A 855005.2B APower	23-A4551-462A	
7	BOTTOM COVER MODULE T200V	39-T2003-012	
8	SCREW M4*6L NI-PZ NY FOR VGA CONN	34-W7003-010	
9	MIC 3M 3V 22K(FM-600) W/CABLE 1200V	23-E0603-222	
10	GASKET(45*5*8#1)	47-00190-456	
11	VME CABLE FOR HOT KEY TO M/B 20P 1200V	43-T2002-031	
12	BAT. 20MM 3V 230MAH W/CABLE 56MM CR	23-22015-P80	
13	HOTKEY BOARD	77-T200S-004	
14	HOTKEY COVER MODULE T200V	42-T2004-102	
15	SCREW M2.5*9L K1 BNI ICT NY	35-B9125-9RA	
16	SCREW M2*10L K1 BNI ICT NY	35-B9120-10A	
17	W/D HDD ASSY T200V	79-T2001-010	Reference Assembly (99-T2005-040)
18	PRODUCT LABEL T200V	45-T2003-010	
19	MINIPCI COVER PC+ABS T200V	42-T2003-011	
20	RAM COVER PC+ABS T200V	42-T2003-022	
21	SCREW M2.5*3L K1 BK/Z ICT NY	35-B6125-3RA	
22	SCREW M2.5*4L K1 BNI ICT NY	35-B9125-4RA	
23	PEN MODULE T200V	42-T2000-101	
24	CPU HEATSINK MODULE T200V	31-T200N-100	
25	CPU COVER MODULE T200V	42-T200S-102	
26	BAT(PD) S L 3.6Ah GLW/MOLI (6 CELLS)	87-T200S-44C	
26	BAT(PD) S L 3.6Ah GLW/MOLI (8 CELLS)	87-T200S-44C-A	
26	BAT(PD) S L 3.6Ah ?? MOLI(6 CELLS)	87-T200S-49C	
26	BAT(PD) S L 4.52P 14.8V 3.6Ah ?? MOLICEL	87-T200S-49C-A	
27	MDC MODEM MODULE (X800) ?? W/EMI	76-32200-004	

Figure A-10  
Bottom  
(T200V)

## Part Lists

## 14.1" LCD (T200V)

Figure A-11  
14.1" LCD  
(T200V)



ITEM	PART NAME	PART NO	REMARK
1	LCD FRONT UP RUBBER SILICONE T200V	47-T2001-030	
2	SCREW M2.5x7L KI BNI ICT NY	35-B9125-7RA	
3	LCD FRONT COVER MODULE T200V	39-T2001-012	
4	SCREW M2.5x6L KI NII ICT NY	35-B1125-6RA	
5	LCD FRONT DOWN RUBBER SILICONE T200V	47-T2001-020	
6	SCREW M2.5x2.5L KI NI ICT NY	35-B1120-2R5	
7	LCD BRACKET(R) SUS T200V	33-T2001-052	
8	COAXIAL CABLE FOR LCD (CP1) T200V	43-T2001-012	
9	COAXIAL CABLE FOR LCD (AU) T200V	43-T2001-021	
10	WIRE CABLE FOR LED BOARD (P) T200V	43-T200S-022	
10	LCD (P) (AMAZING) TOUCH PANEL MODULE T200V	50-J2252-C00-1	
10	LCD (AU) (AMAZING) TOUCH PANEL MODULE T200V	50-J2287-G08-1	
11	LCD BRACKET(L) SUS T200V	33-T2001-062	
12	LCD SHIELDING AL T200V	33-T2001-050	
13	ANTENNA 2.4GHZ PIFA FOR WLAN ODP-113n	23-74284-A90	
14	VIDEO CAMERA CM3130, 300K Pixel Resolu	88-D40C0-410	OPTION
15	LCD BACK COVER MODULE T200V	39-T2001-028	
16	LEDG BASE MODULE T200V	42-T2001-100	
17	LED BOARD	77-T2004-004	
18	LCD HINGE (L) SUM22 T200V	33-T2001-022	
19	LCD INVERTER BRACKET X7 T200V	33-T2001-080	
20	WIRE CABLE FOR INVERTER GP T200V	43-T200S-012	
21	INVERTER MYLAR FRI T200V	40-T200S-022	
22	INVERTER BOARD	77-T200R-004	
23	LCD HINGE (R) SUM22 T200V	33-T2001-032	
24	LCD LED BRACKET X7 T200V	33-T2001-070	

## Hard Disk Drive (T200V)

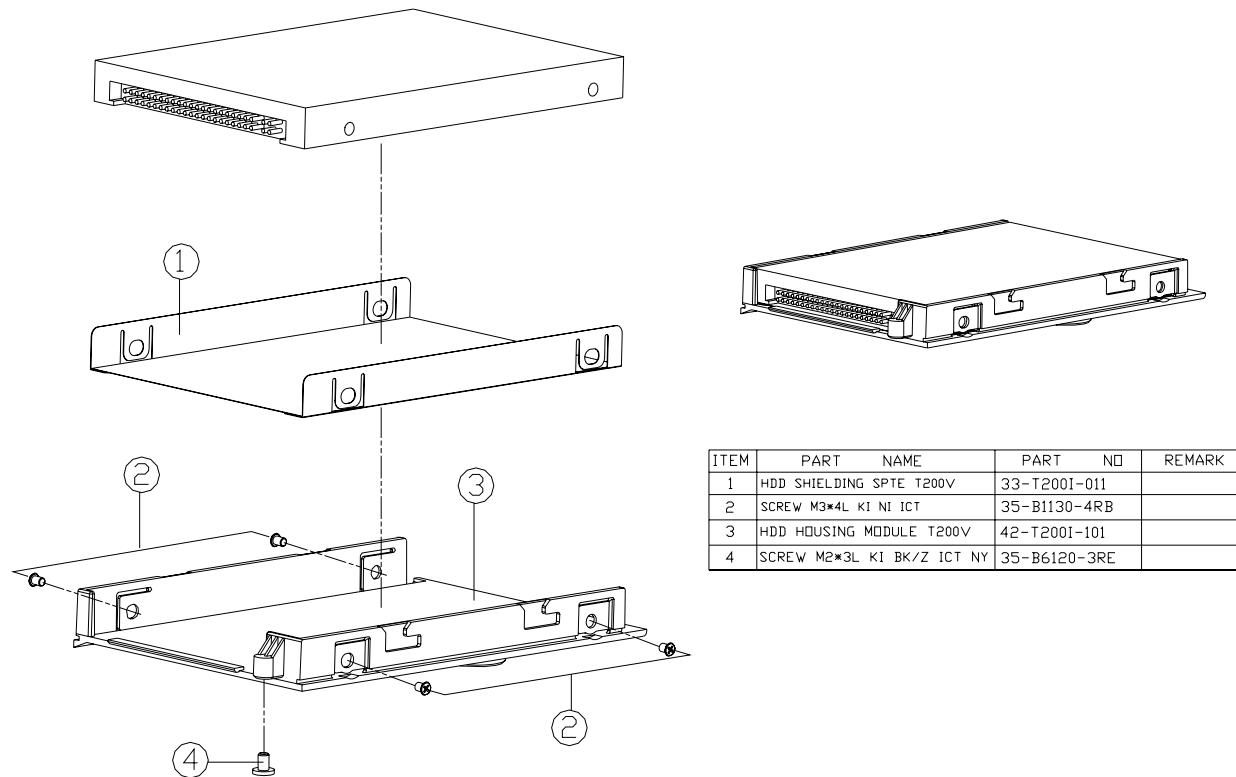
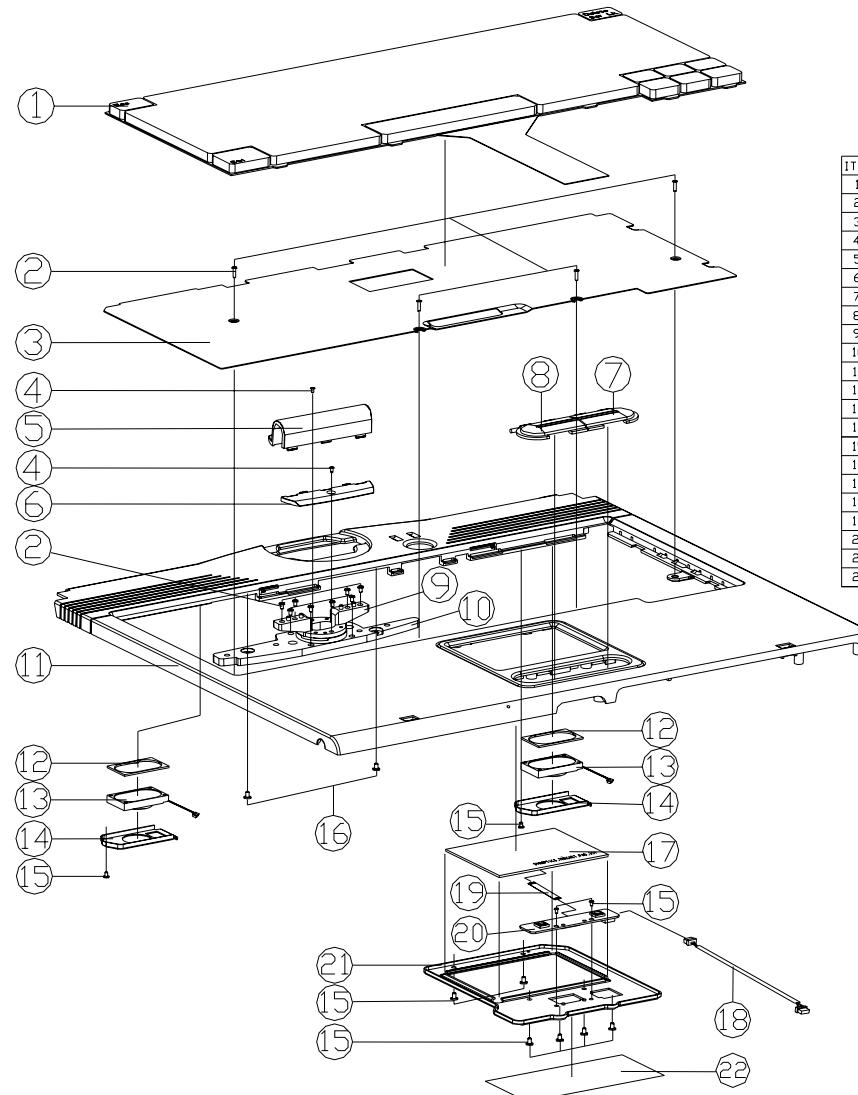


Figure A-12  
Hard Disk Drive  
(T200V)

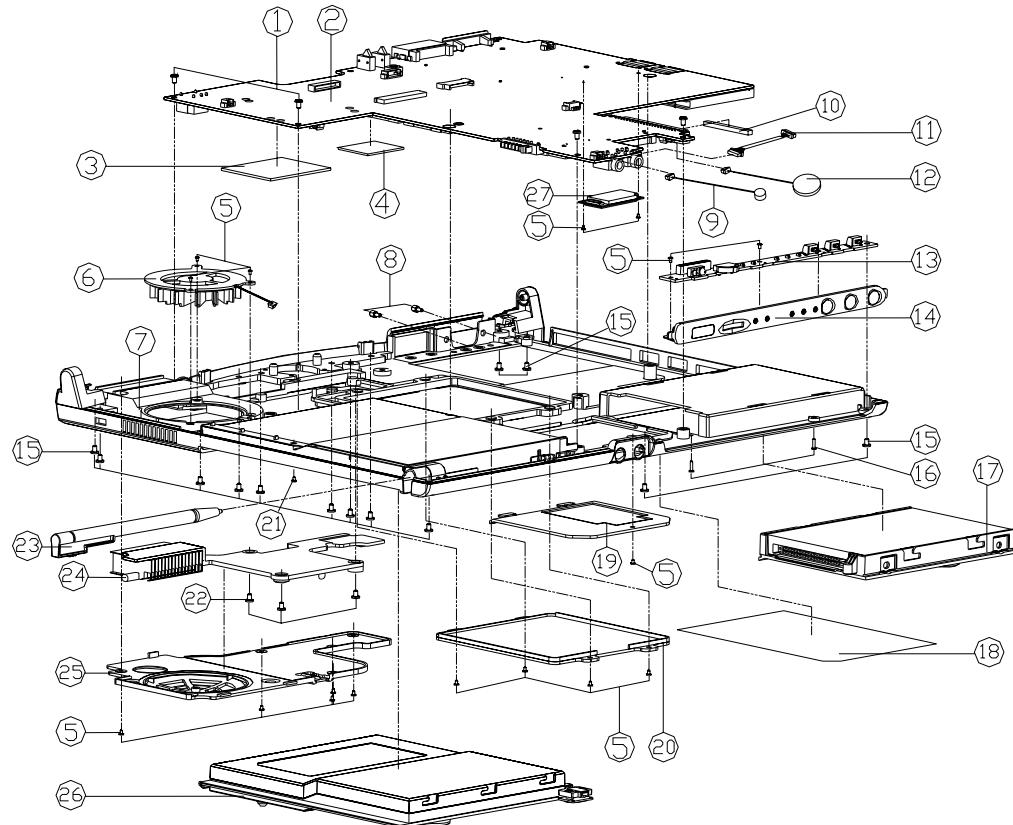
**Part Lists****Top (T210V)**

*Figure A-13*  
**Top**  
**(T210V)**



ITEM	PART	NAME	PART NO	REMARK
1	KEYBOARD		80-T200B-7G0	
2	SCREW M2.5*6L KI NI ICT NY		35-B1125-6RB	
3	KEYBOARD SUPPORTER BRACKET MODULE T200V		33-T2007-102	
4	SCREW M2*3L KI BK/Z ICT NY		35-B6120-3RE	
5	HINGE ROTATION COVER(B)PC+ABS T210V		42-T21VY-020	
6	HINGE ROTATION COVER(F)PC+ABS T200V		42-T21VY-010	
7	TRACKET PAD BUTTON (R)PC+ABS T210V		42-T21V2-021	
8	TRACKET PAD BUTTON (L)PC+ABS T210V		42-T21V2-031	
9	SCREW M2.5*6L B NI ICT NY		35-41125-6R0	
10	HINGE BASE MODULE,Z2 T200V		33-T200Y-103	
11	TOP CASE MODULE T210V		39-T21V2-011	
12	SPEAKER RUBBER,SILICONE T200V		47-T200T-020	
13	SPEAKER 25*15*5.7mm IW 4 FG25H5A		23-32510-400A	
14	SPEAKER BRACKET,SUS T200V		33-T200T-010	
15	SCREW M2*2.5L KI NI ICT NY		35-B1120-2R5	
16	SCREW M2.5*3L KI BK/Z ICT NY		35-B6125-3RA	
17	TOUCH PAD SYNAPTICS TM41PDG351-I		49-42002-010	
18	WIRE CABLE FOR TOUCH PAD TO M/B 4P T200V		43-T2002-011	
19	FFC CABLE FOR TOUCH PAD 12P T200V		43-T2002-020	
20	TRACKET PAD BOARD		77-T200M-003-1	
21	TRACKET PAD BRACKET MODULE T210V		33-T21V2-100	
22	MYLAR FOR TRACKET PAD BRACKET		47-T2002-010	

## Bottom (T210V)

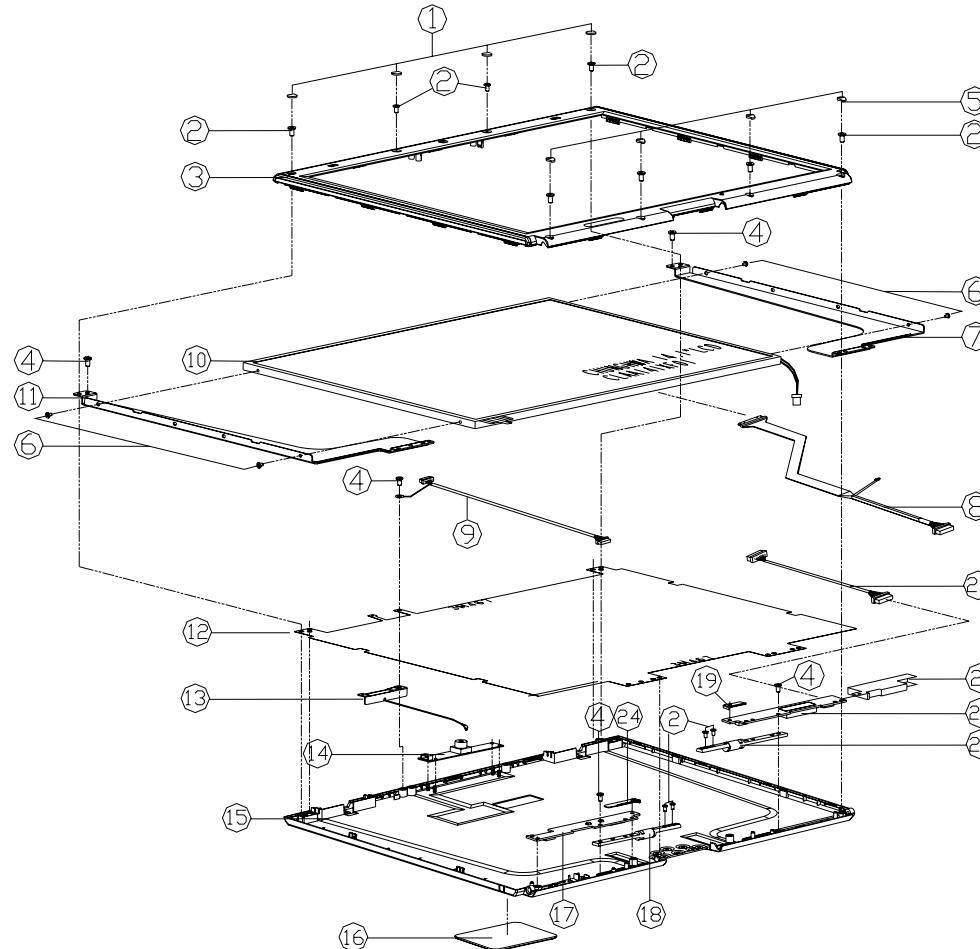


ITEM	PART NO	NAME	PART NO	REMARK
1	SCREW M2.5*6L B NI ICT NY	35-41125-6R0		
2	MAIN BOARD	77-T2000-003		
3	CPU THERMAL PAD SILICONE T200V	47-T200P-010		
4	NORTH BRIDGE THERMAL PAD SILICONE T200V	47-T200P-020		
5	SCREW M2*3L KI BK/Z ICT NY	35-B6120-3RE		
6	FAN 45mm 5v 0.2A BS500SLB ADPOWER	23-A4511-462A		
7	BOTTOM COVER MODULE T210V	39-T21V3-011		
8	SCREW #4*8L NI-PZ NY FOR VGA CDDN	34-W7003-010		
9	HIC 6MM 3V 22KIGTH-60A W/CABLE T200V	23-E0603-222		
10	GASKET (40L*5W*8H)	47-00190-409		
11	WIRE CABLE FOR HOT KEY TO M/B ZIP T200V	43-T2002-031		
12	BAT 2000 3V 230mAH W/CABLE 50MM CR	23-22015-P80		
13	HOTKEY BOARD	77-T200S-005		
14	HOTKEY ASSY T200V	79-T2004-001		
15	SCREW M2.5*9L KI BNI ICT NY	35-B9125-9RA		
16	SCREW M2*10L KI BNI ICT NY	35-B9120-10A		
17	W/D HHD ASSY T210V	79-T21V1-010		Reference No. 99-121V3-040
18	PRODUCT LABEL T210V	45-T21V3-010		
19	MINIPCI COVER,PC+ABS T200V	42-T2003-011		
20	RAM COVER,PC+ABS T200V	42-T21V3-020		
21	SCREW M2.5*4L KI BK/Z ICT NY	35-B6125-3RA		
22	SCREW M2.5*4L KI BNI ICT NY	35-B9125-4RA		
23	PEN MODULE T210V	42-T21V0-100		
24	CPU HEATSINK MODULE T200V	31-T200N-100		
25	CPU COVER MODULE T210V	42-T21VS-100		
26	BATPO? S L 36AH GLV/MOLI 16 CELLS	87-T200S-44C		
26	BATPO? S L 36AH GLV/MOLI 18 CELLS	87-T200S-44C-A		
26	BATPO? S L 36AH ?? MOLI6 CELLS?	87-T200S-49C		
26	BATPO? S L ASPI 14.8V 36AH ?? MOLI6 CELLS	87-T200S-49C-A		
27	MDC MODEM MODULE (X800) ?? W/EMI	76-32200-004		

Figure A-14  
Bottom  
(T210V)

**Part Lists****14.1" LCD (T210V)**

*Figure A-15*  
**14.1" LCD  
(T210V)**



ITEM	PART	NAME	PART NO	REMARK
1	LCD FRONT UP RUBBER SILICONE T200V		47-T2001-030	
2	SCREW M2.5x7L K1 BNI ICT NY		35-B9125-7RA	
3	LCD FRONT COVER MODULE T200V		39-T21V1-011	
4	SCREW M2.5x6L K1 NI ICT NY		35-B1125-6RB	
5	LCD FRONT DOWN RUBBER SILICONE T200V		47-T2001-020	
6	SCREW M2.5x5L K1 NI ICT NY		35-B1120-2R5	
7	LCD BRACKET(R) SUZ T200V		33-T2001-052	
8	COAXIAL CABLE FOR LCD CPD T200V		43-T2001-012	
9	WIRE CABLE FOR LED BOARD 16P T200V		43-T200S-023	
10	LCD OPT GLASS(FRONT) PANEL MODULE T200V		50-J2252-C00-1	
10	LCD OPT GLASS(BEHIND) PANEL MODULE T200V		50-J2287-G08-1	
11	LCD BRACKET(L) SUZ T200V		33-T2001-062	
12	LCD SHIELDING AL T200V		33-T2001-050	
13	ANTENNA 24GFC PIFA FOR WLAN 03-11Dx		23-742R4-A90	
14	VIDEO CAMERA CM0130, 30K Pixels Resolu		88-D40C0-410	OPTION
15	LCD BACK COVER MODULE T200V		39-T21V1-021	
16	LOGO BASE MODULE T200V		42-T21V1-101	
17	LED BOARD		77-T2004-004	
18	LCD HINGE (L) SUM22 T200V		33-T2001-023	
19	LCD INVERTER BRACKET X7 T200V		33-T2001-081	
20	WIRE CABLE FOR INVERTER GP T200V		43-T200S-013	
21	INVERTER MYLAR FR T200V		40-T200S-082	
22	INVERTER BOARD		77-T200R-004	
23	LCD HINGE (R) SUM22 T200V		33-T2001-033	
24	LCD LED BRACKET,X7 T200V		33-T2001-071	

## Hard Disk Drive (T210V)

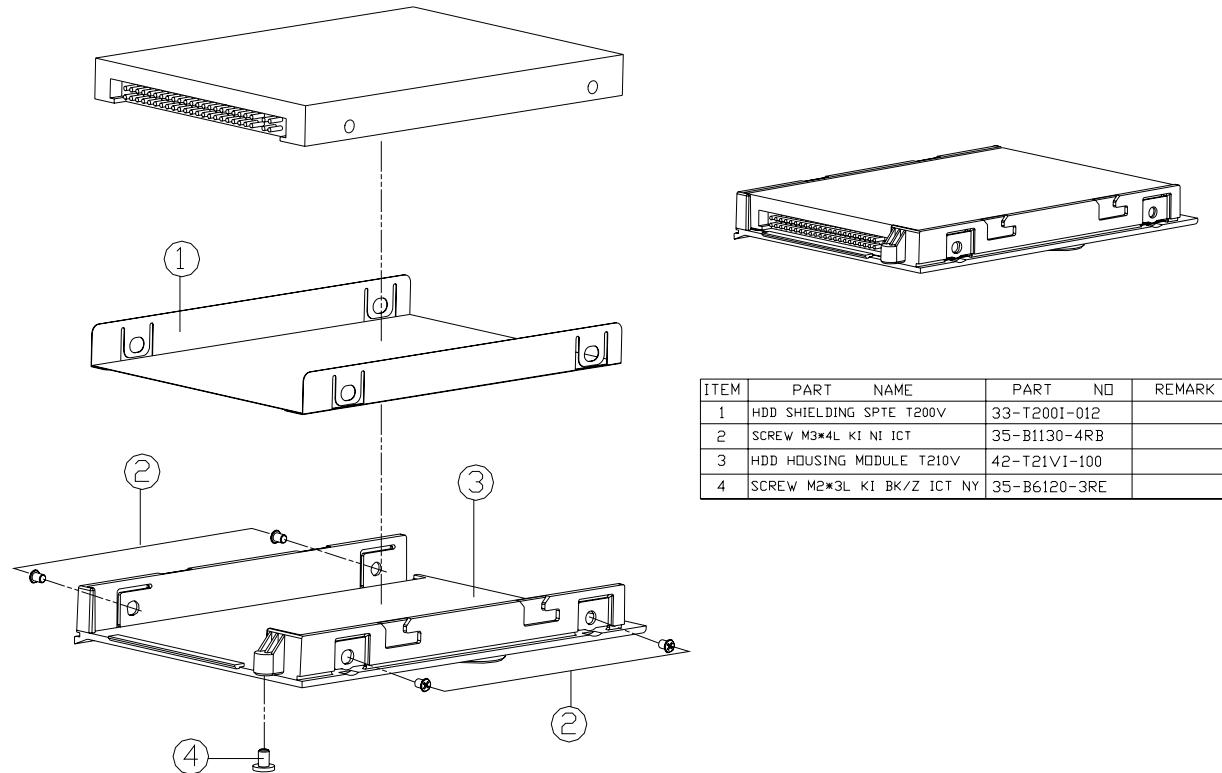


Figure A-16  
Hard Disk Drive  
(T210V)



# Appendix B: T200C/T210C Schematic Diagrams

This appendix has circuit diagrams of the T200C/T210C computers PCB's:

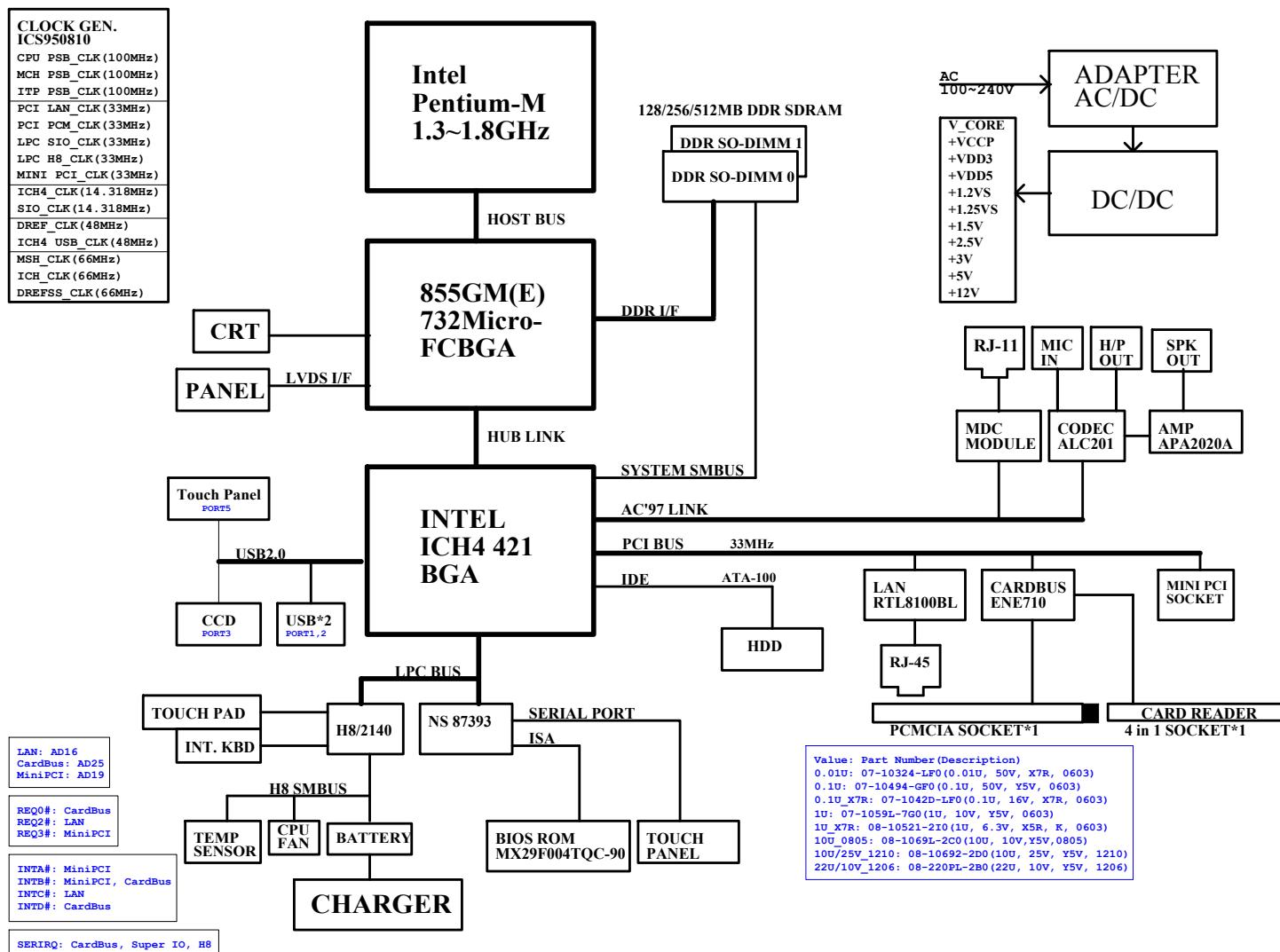
Diagram - Page	Diagram - Page
<i>System Block Diagram - Page B - 2</i>	<i>PCMCIA ENE CB710 - Page B - 18</i>
<i>Pentium-M-1 - Page B - 3</i>	<i>PCM Socket, 4 IN 1 Socket - Page B - 19</i>
<i>Pentium-M-2 - Page B - 4</i>	<i>SIO, BIOS - Page B - 20</i>
<i>855GM-1 - Page B - 5</i>	<i>Touch Panel - Page B - 21</i>
<i>855GM-2 - Page B - 6</i>	<i>Hitachi H8S - Page B - 22</i>
<i>855GM-3 - Page B - 7</i>	<i>LED B'd, HOT KEY B'd, FAN, K/B - Page B - 23</i>
<i>DDR SODIMM - Page B - 8</i>	<i>CODEC, AMP - Page B - 24</i>
<i>DDR Termination - Page B - 9</i>	<i>+3VS, +5VS - Page B - 25</i>
<i>LVDS, CRT - Page B - 10</i>	<i>+2.5V, +1.25V, 1.5V - Page B - 26</i>
<i>Clock Generator - Page B - 11</i>	<i>V_CORE/ +VCCP/ +1.2VS - Page B - 27</i>
<i>ICH4-1 - Page B - 12</i>	<i>5V, 3.3V, +1.2, 1.5V - Page B - 28</i>
<i>ICH4-2 - Page B - 13</i>	<i>Charger - Page B - 29</i>
<i>ICH4-3, HDD - Page B - 14</i>	<i>Hot Key - Page B - 30</i>
<i>USB2.0 Port - Page B - 15</i>	<i>Inverter - Page B - 31</i>
<i>MDC, Mini PCI - Page B - 16</i>	<i>LCD LED Board - Page B - 32</i>
<i>LAN RTL8100BL - Page B - 17</i>	

*Table B - 1  
Schematic Diagram*

## Schematic Diagrams

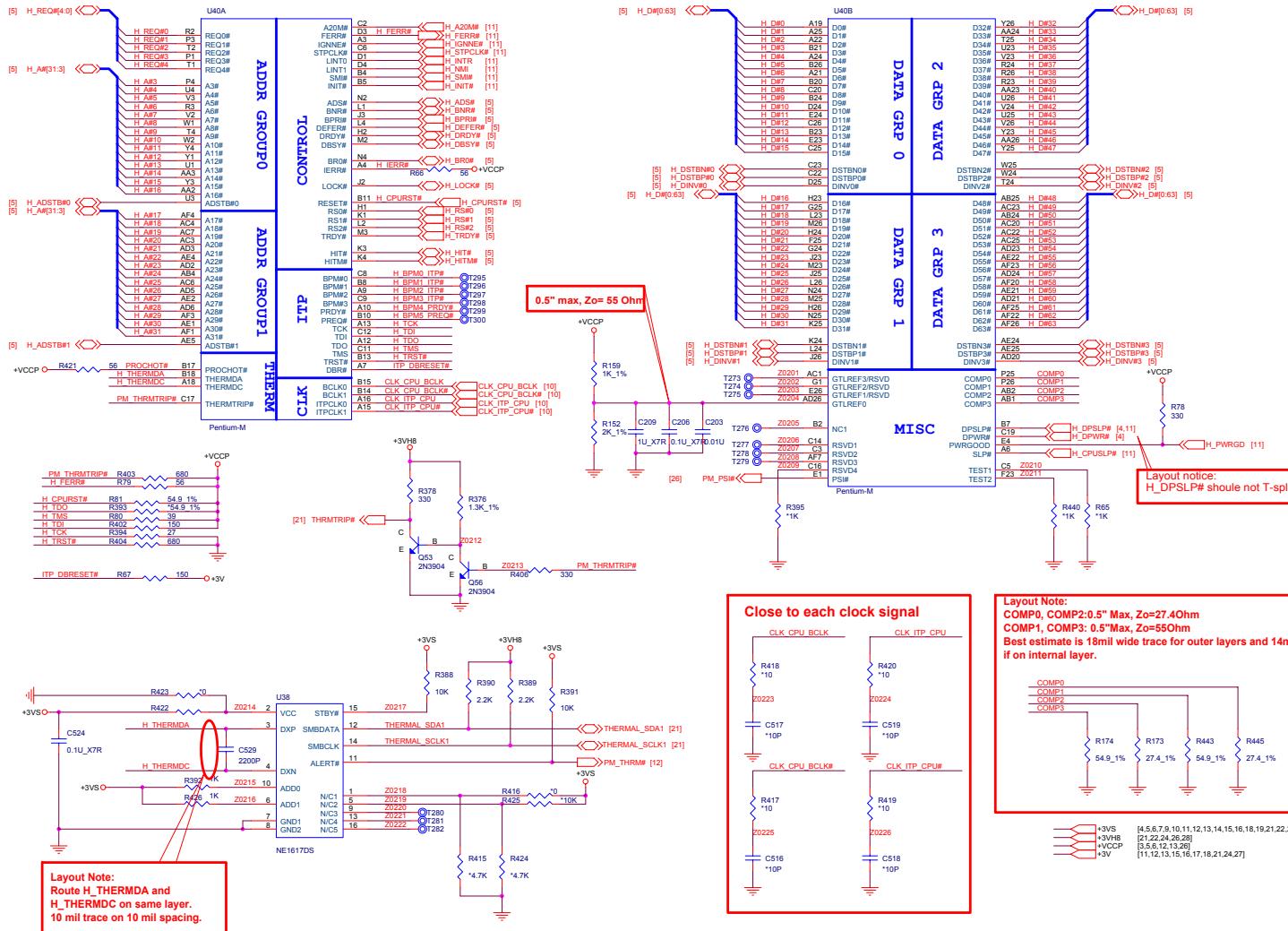
### Sheet 1 of 30 System Block Diagram

## System Block Diagram



## Sheet 2 of 31 Pentium-M-1

### Pentium-M-1

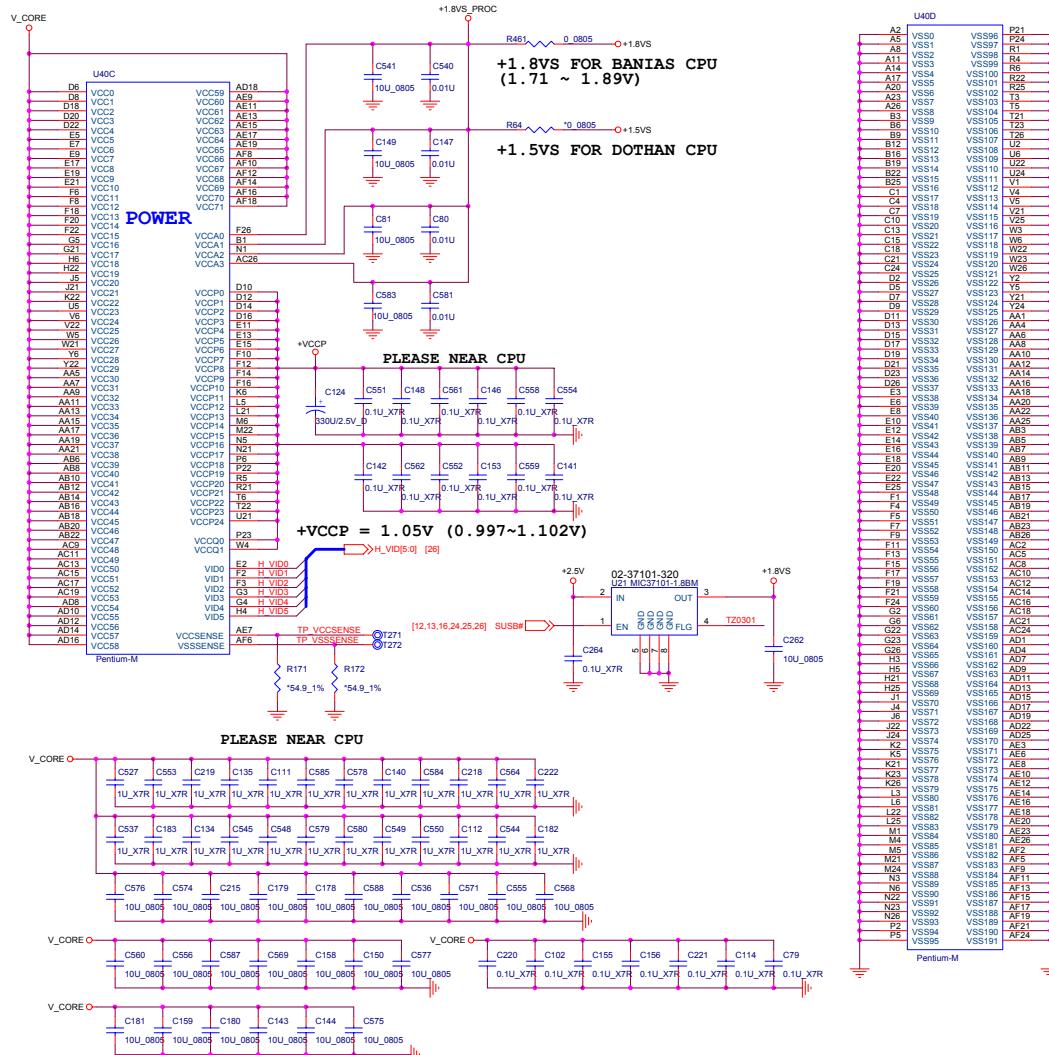


## B. T2X0C Schematics

### Schematic Diagrams

## Pentium-M-2

Sheet 3 of 31  
Pentium-M-2



1.7GHz & 1.468V = 24.5W  
1.6GHz & 1.468V = 24.5W  
1.5GHz & 1.468V = 24.5W  
1.4GHz & 1.468V = 22W  
1.3GHz & 1.468V = 22W  
1.1GHz & 1.468V = 12W

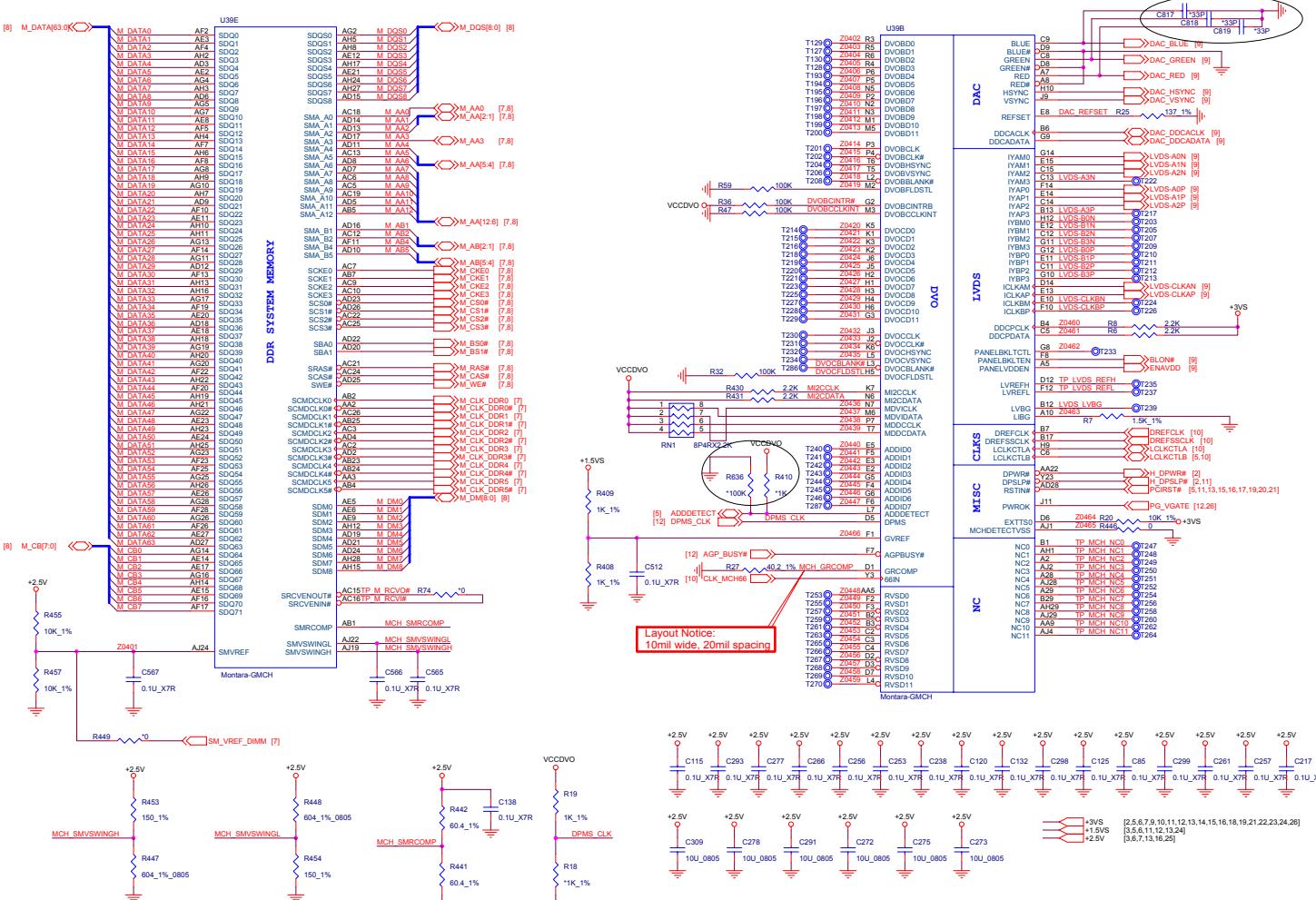
VID	Vcc	VID	Vcc
5 4 3 2 1 0	V	5 4 3 2 1 0	V
0 0 0 0 0 0	1.708	1 0 0 0 0 0	1.196
0 0 0 0 0 1	1.692	1 0 0 0 1 0	1.180
0 0 0 0 1 0	1.676	1 0 0 0 1 1	1.164
0 0 0 0 1 1	1.660	1 0 0 0 0 1	1.148
0 0 0 1 0 0	1.644	1 0 0 1 0 0	1.132
0 0 0 1 0 1	1.628	1 0 0 1 0 1	1.116
0 0 0 1 1 0	1.612	1 0 0 1 1 1	1.100
0 0 0 1 1 1	1.596	1 0 0 1 1 1	1.084
0 0 1 0 0 0	1.580	1 0 1 0 0 0	1.068
0 0 1 0 0 1	1.564	1 0 1 0 0 1	1.052
0 0 1 0 1 0	1.548	1 0 1 0 1 0	1.036
0 0 1 0 1 1	1.532	1 0 1 0 1 1	1.020
0 0 1 1 0 0	1.516	1 0 1 1 0 0	1.004
0 0 1 1 0 1	1.500	1 0 1 1 1 0	0.988
0 0 1 1 1 0	1.484	1 0 1 1 1 1	0.972
0 0 1 1 1 1	1.468	1 0 1 1 1 1	0.956
0 1 0 0 0 0	1.452	1 1 0 0 0 0	0.940
0 1 0 0 0 1	1.436	1 1 0 0 0 1	0.924
0 1 0 0 1 0	1.420	1 1 0 0 1 0	0.908
0 1 0 0 1 1	1.404	1 1 0 1 0 1	0.892
0 1 0 1 0 0	1.388	1 1 0 1 0 1	0.876
0 1 0 1 0 1	1.372	1 1 0 1 0 1	0.860
0 1 0 1 1 0	1.356	1 1 0 1 1 0	0.844
0 1 0 1 1 1	1.340	1 1 0 1 1 1	0.828
0 1 1 0 0 0	1.324	1 1 1 0 0 0	0.812
0 1 1 0 0 1	1.308	1 1 1 0 0 1	0.796
0 1 1 0 1 0	1.292	1 1 1 0 1 0	0.780
0 1 1 0 1 1	1.276	1 1 1 0 1 1	0.764
0 1 1 1 0 0	1.260	1 1 1 1 0 0	0.748
0 1 1 1 0 1	1.244	1 1 1 1 0 1	0.732
0 1 1 1 1 0	1.228	1 1 1 1 1 0	0.716
0 1 1 1 1 1	1.212	1 1 1 1 1 1	0.700

V\_CORE [28]  
+VCCP [2,5,6,12,13,26]  
+1.8VS [13]  
+1.5VS [4,5,6,11,12,13,24]  
+2.5V [4,6,7,15,16,25]

B - 4 Pentium-M-2 (71-T20C0-003)

## 855GM-1

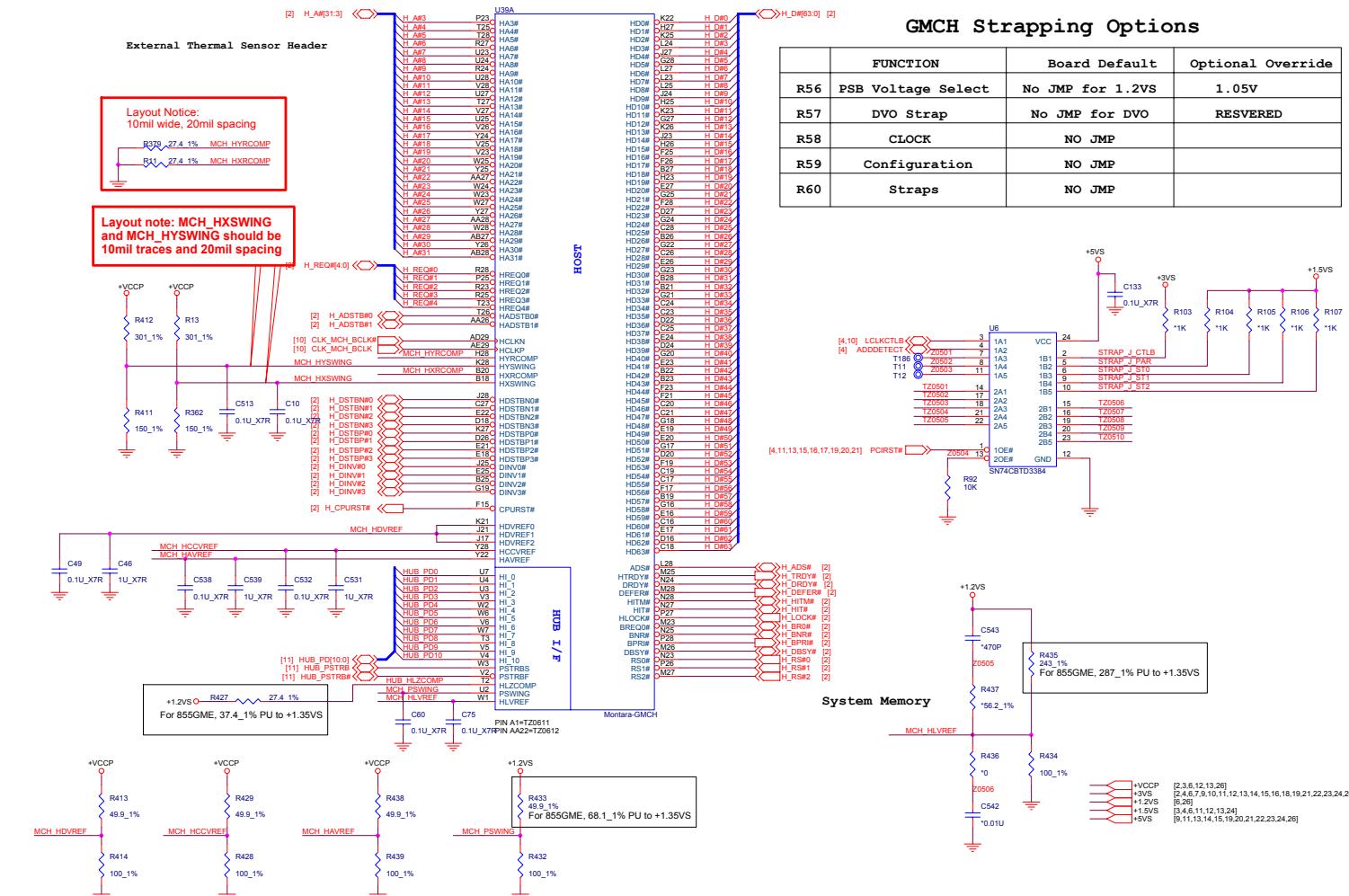
Sheet 4 of 31  
855GM-1



## Schematic Diagrams

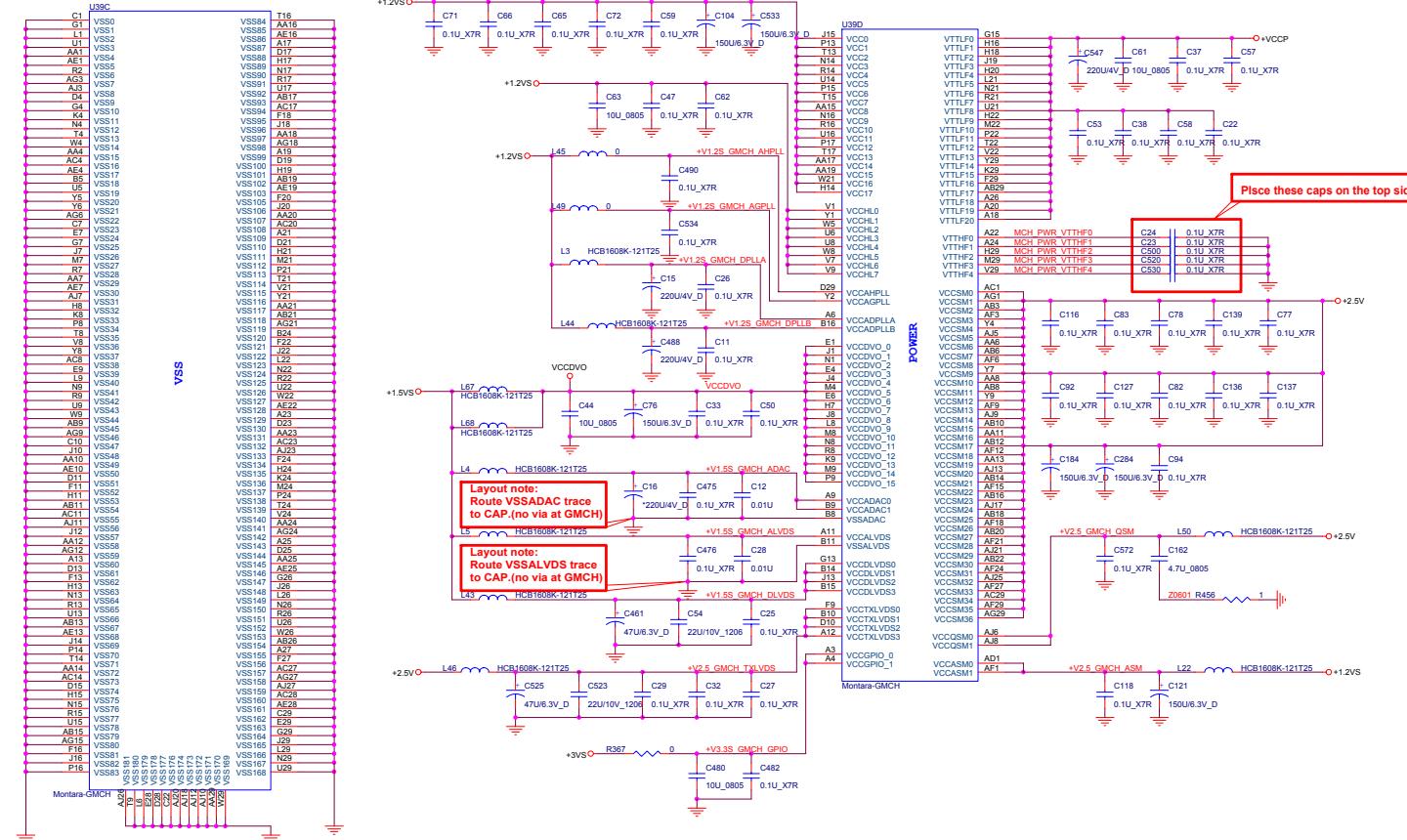
# 855GM-2

Sheet 5 of 31  
855GM-2



## 855GM-3

Sheet 6 of 31  
855GM-3

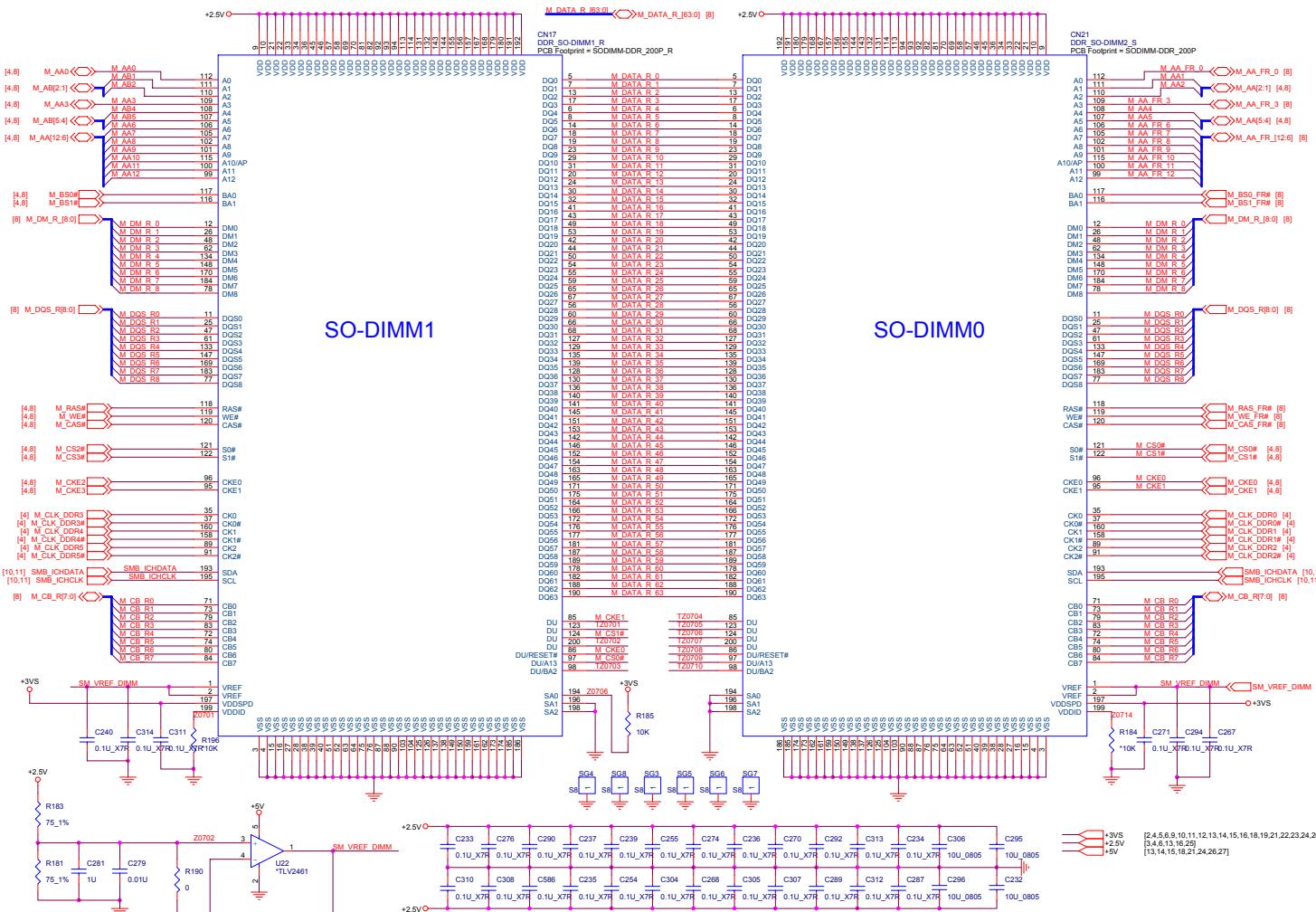


## B. T2X0C Schematics

### Schematic Diagrams

## DDR SODIMM

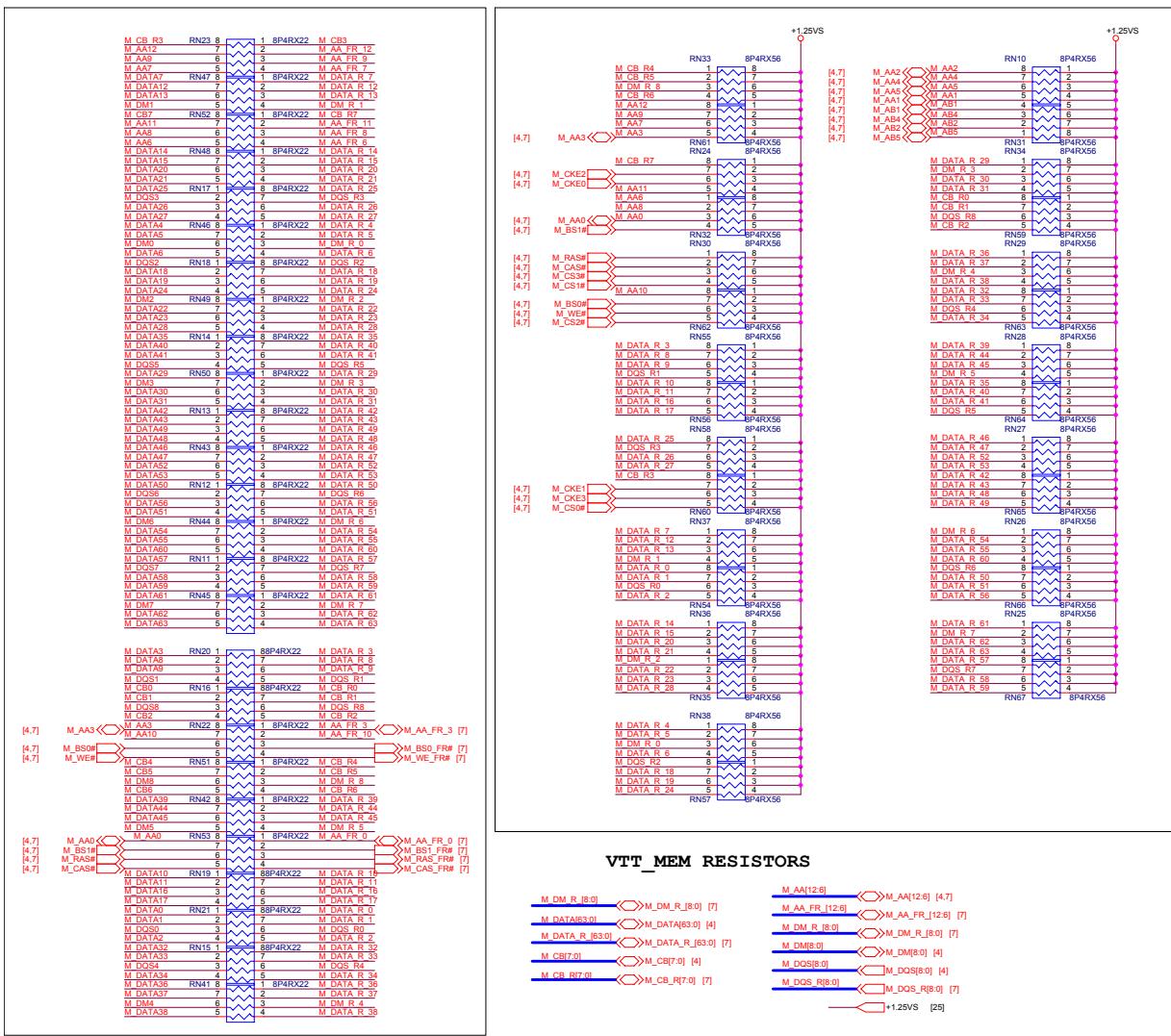
Sheet 7 of 31  
DDR SODIMM



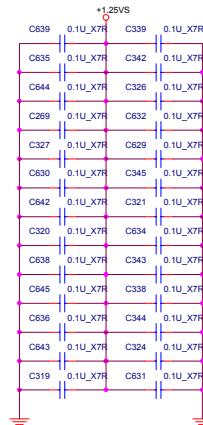
B - 8 DDR SODIMM (71-T20C0-003)

# Schematic Diagrams

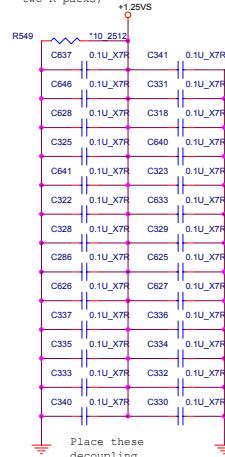
## DDR Termination



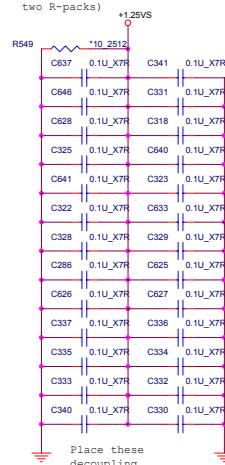
Sheet 8 of 31  
DDR Termination



NOTE: Place these decoupling capacitors close to VTT MEM termination resistors. (one decoupling capacitor for each two R-packs)

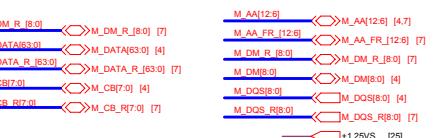


Place these decoupling capacitors on VTT\_MEM trace



Place these decoupling capacitors on VTT\_MEM trace

### VTT\_MEM RESISTORS

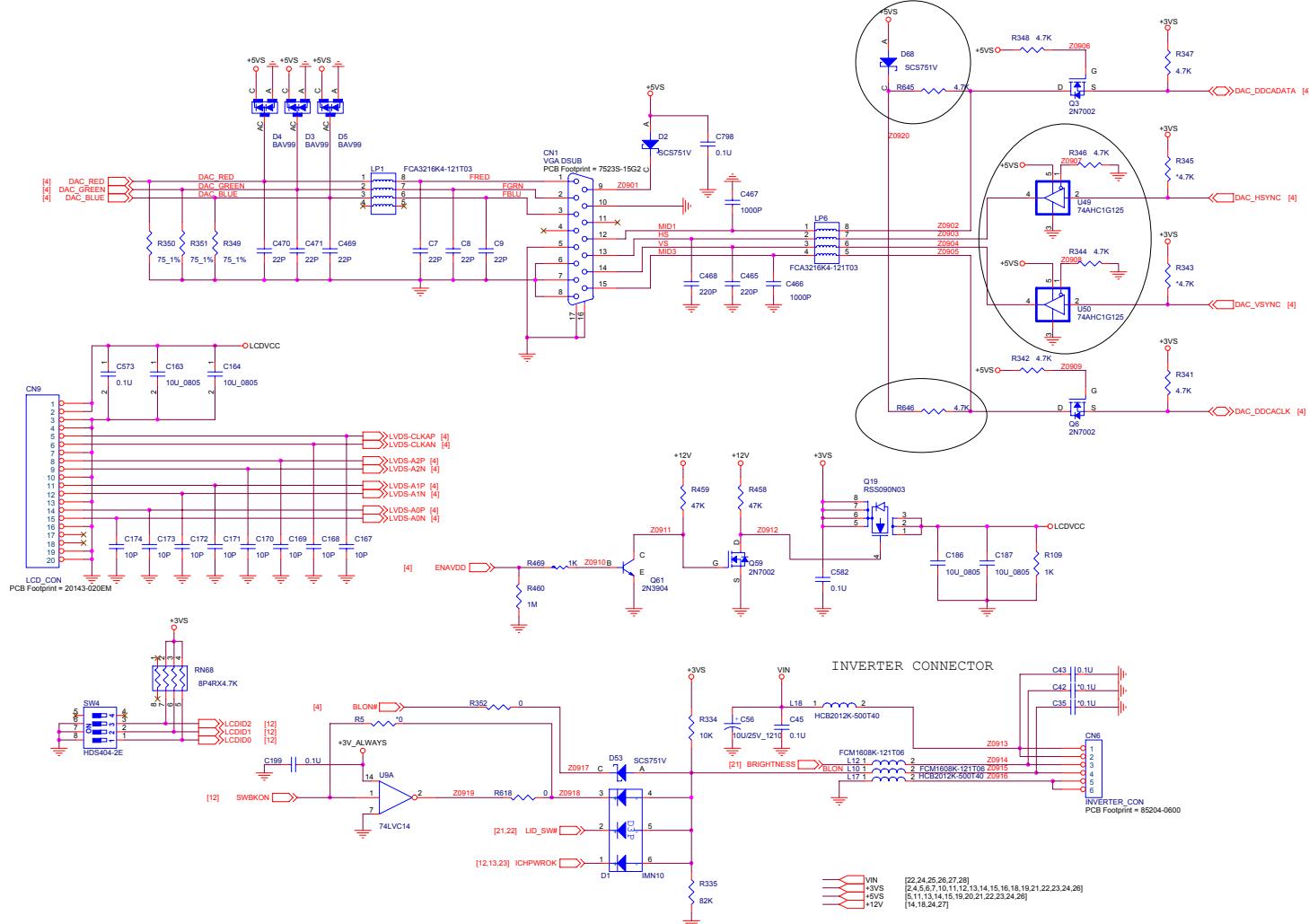


## B. T2X0C Schematics

### Schematic Diagrams

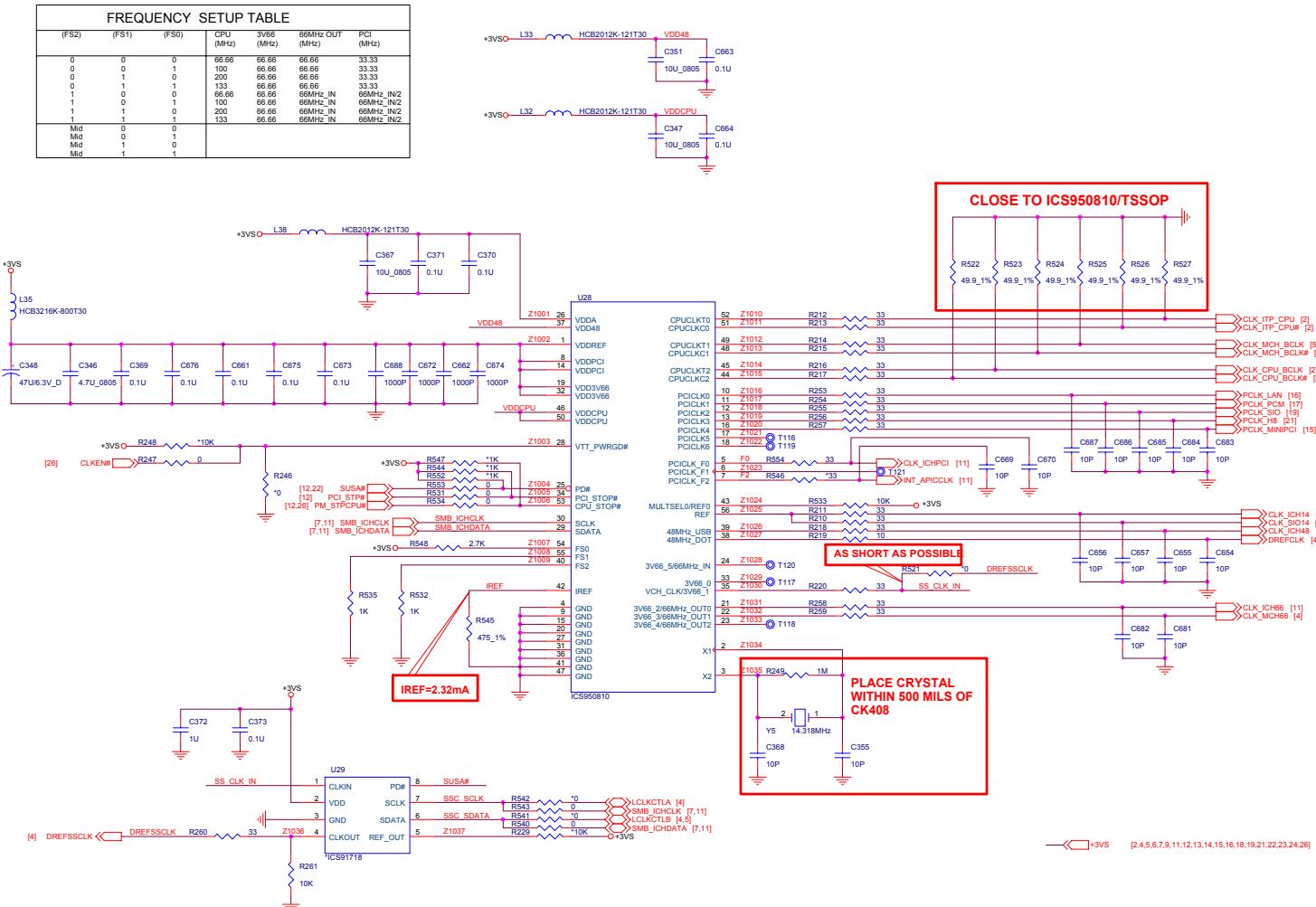
### LVDS, CRT

Sheet 9 of 31  
LVDS, CRT



## Clock Generator

Sheet 10 of 31  
Clock Generator

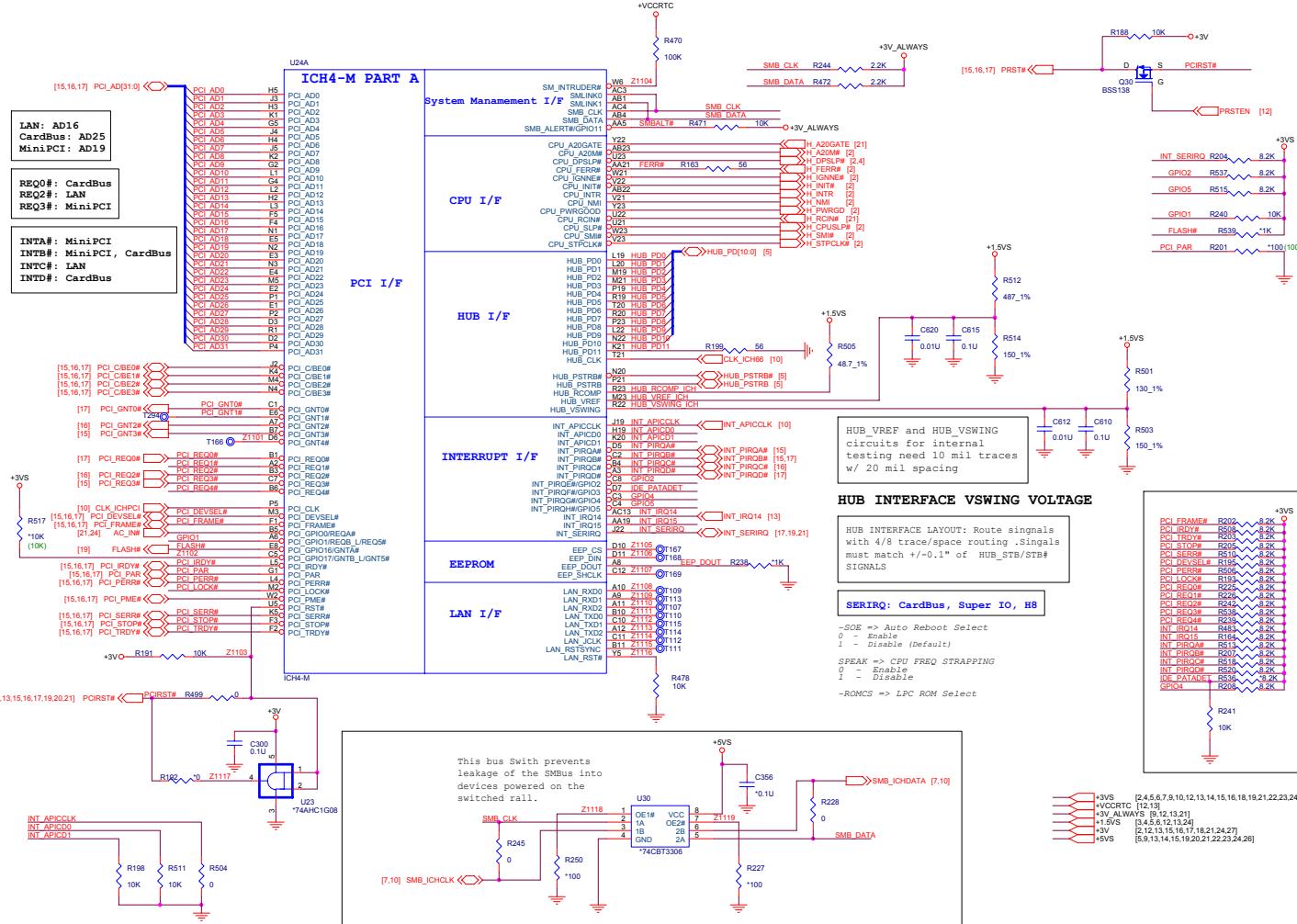


## B. T2X0C Schematics

## Schematic Diagrams

### ICH4-1

Sheet 11 of 31  
ICH4-1

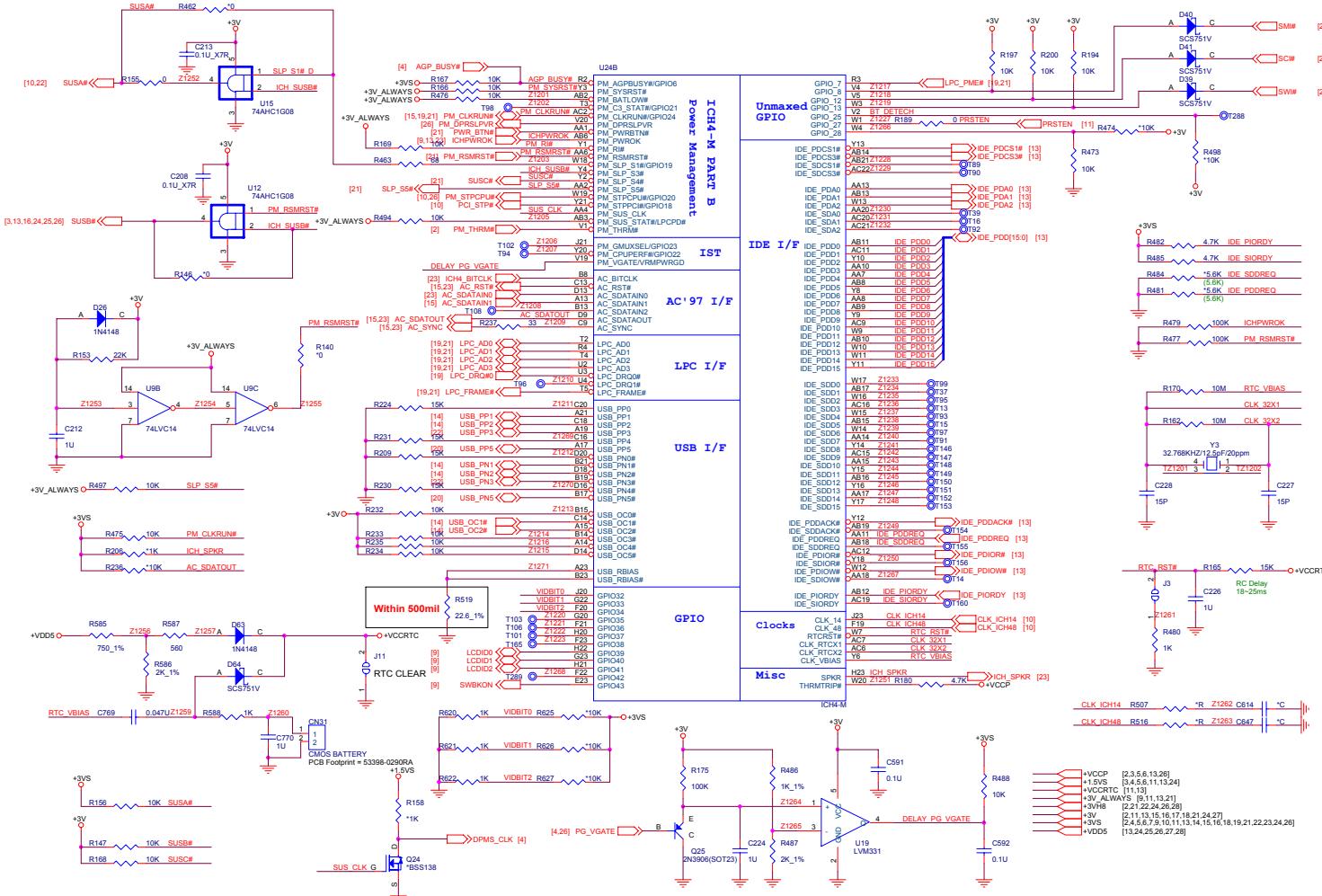


B - 12 ICH4-1 (71-T20C0-003)

# Schematic Diagrams

ICH4-2

Sheet 12 of 31  
ICH4-2



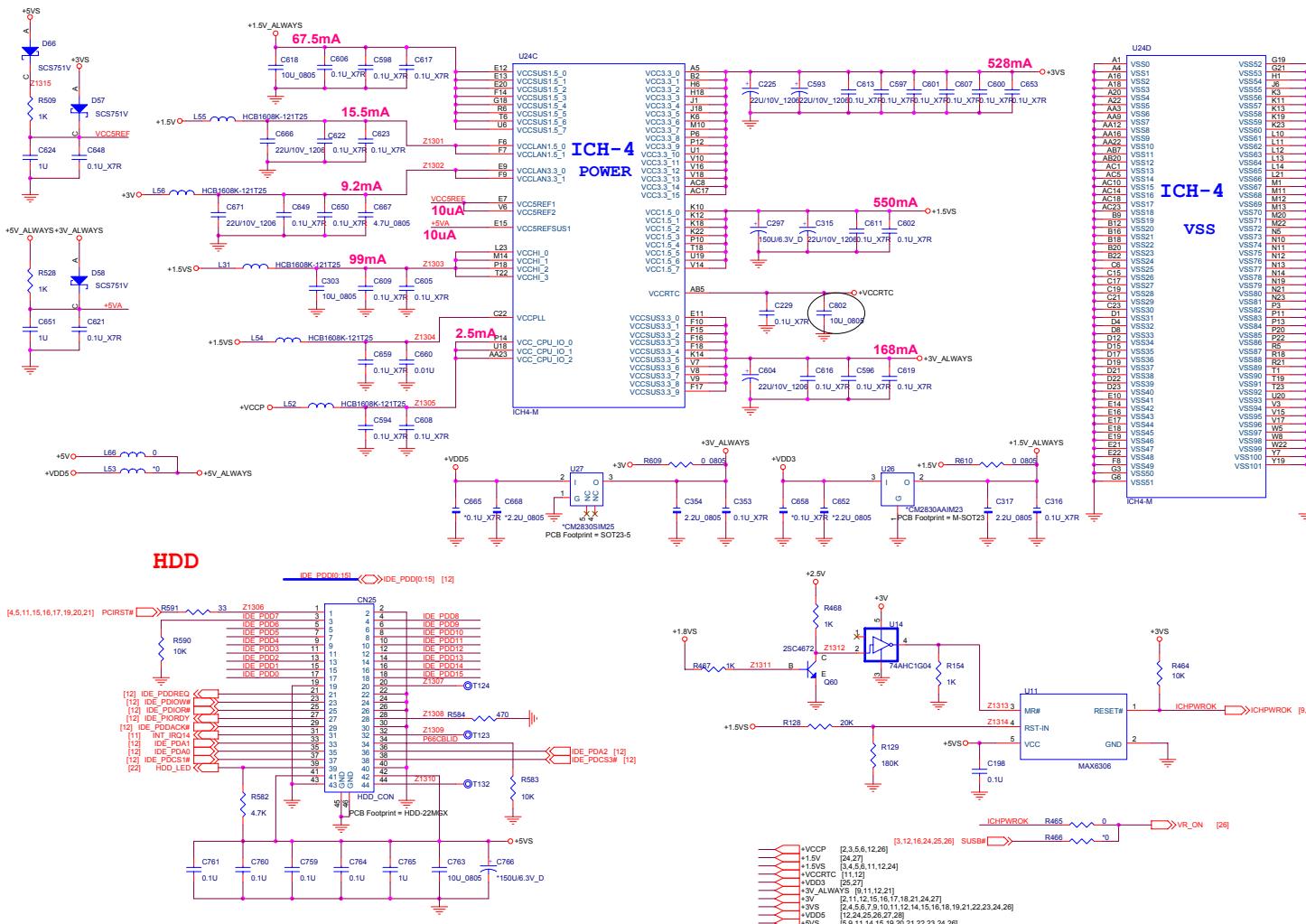
B. T2X0C Schematics

B. T2X0C Schematics

## Schematic Diagrams

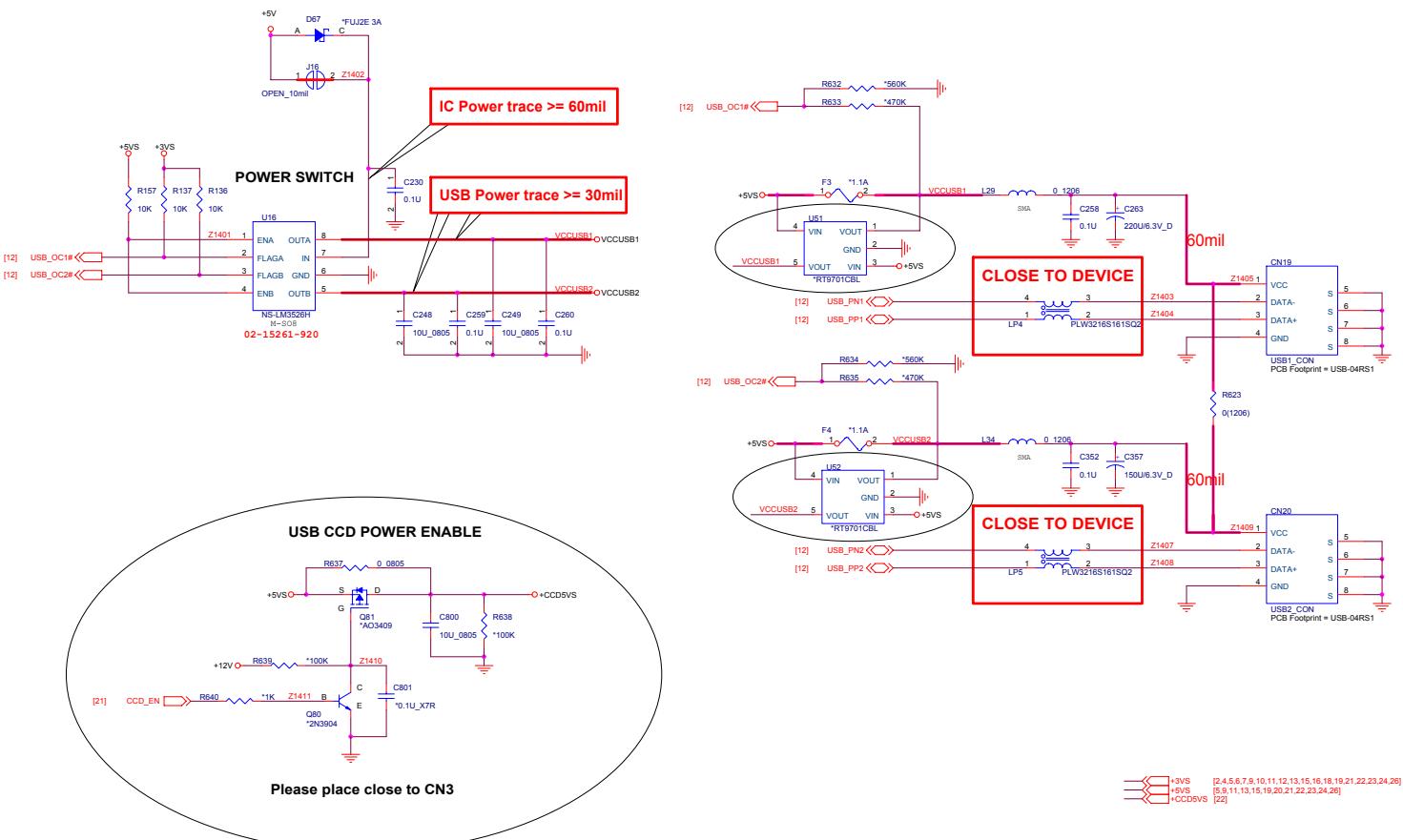
ICH4-3, HDD

Sheet 13 of 31  
ICH4-3, HDD



B - 14 ICH4-3, HDD (71-T20C0-003)

## USB2.0 Port

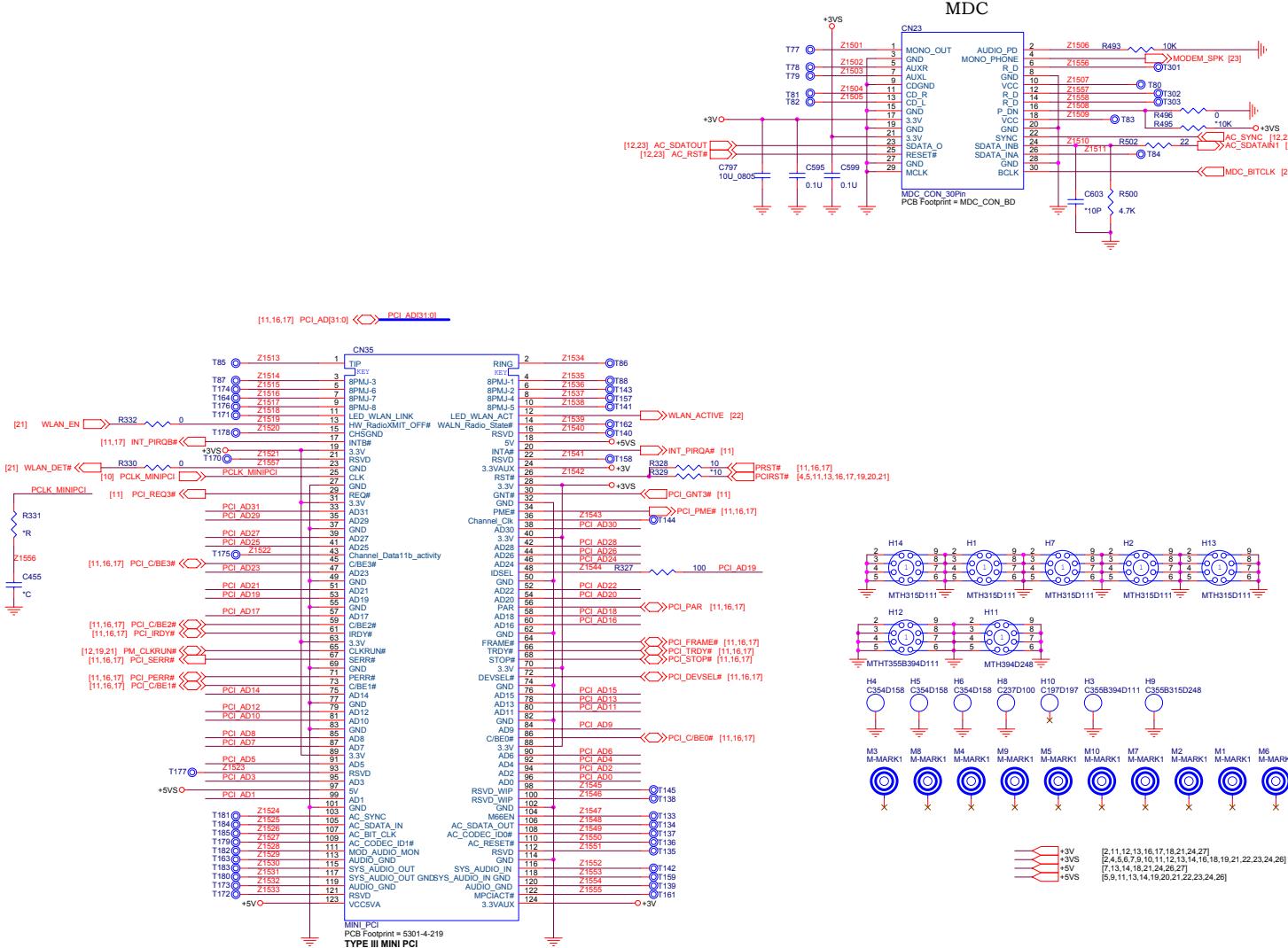


## B. T2X0C Schematics

## Schematic Diagrams

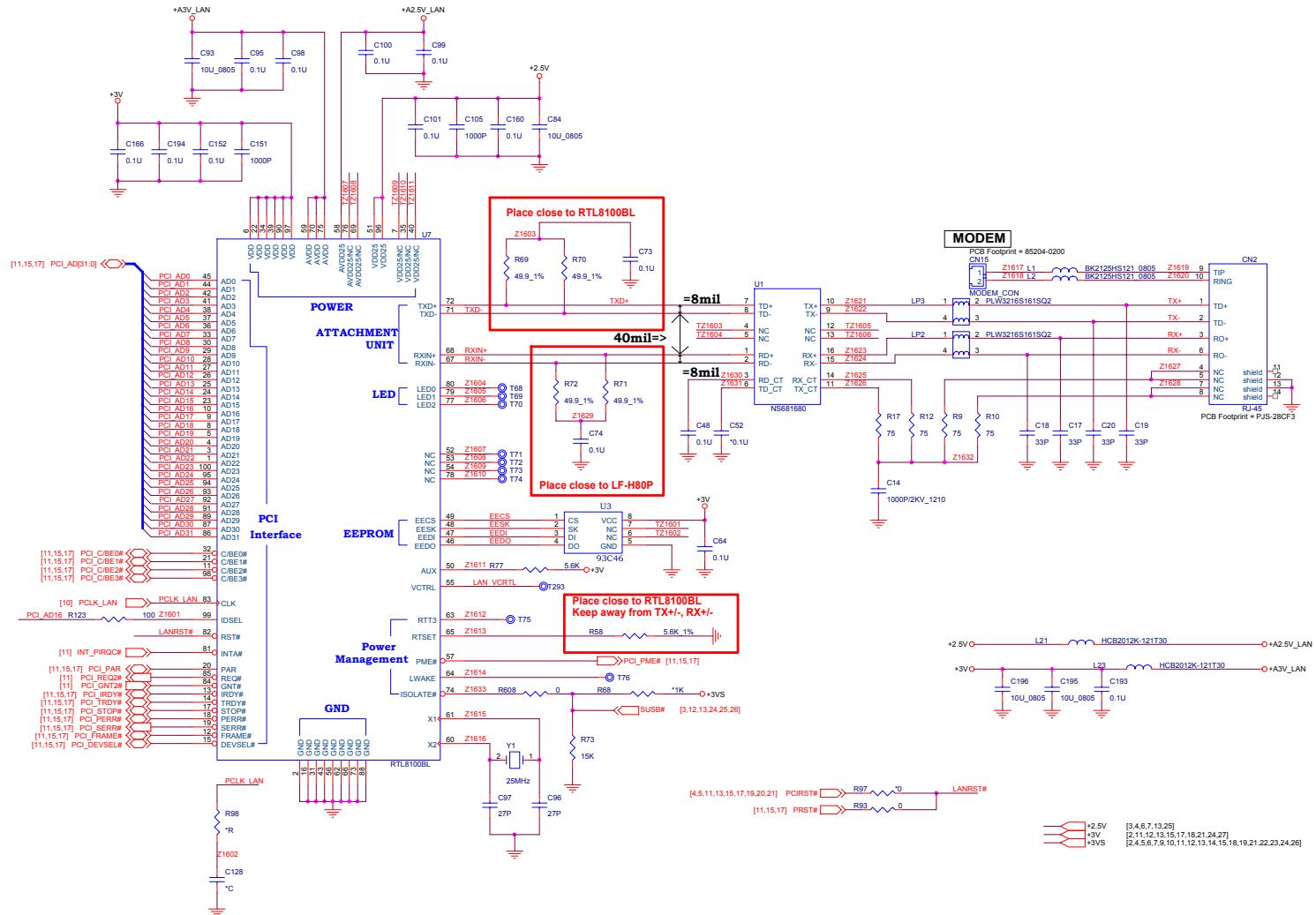
# MDC, Mini PCI

Sheet 15 of 31  
MDC, Mini PCI



## LAN RTL8100BL

Sheet 16 of 31  
LAN RTL8100BL

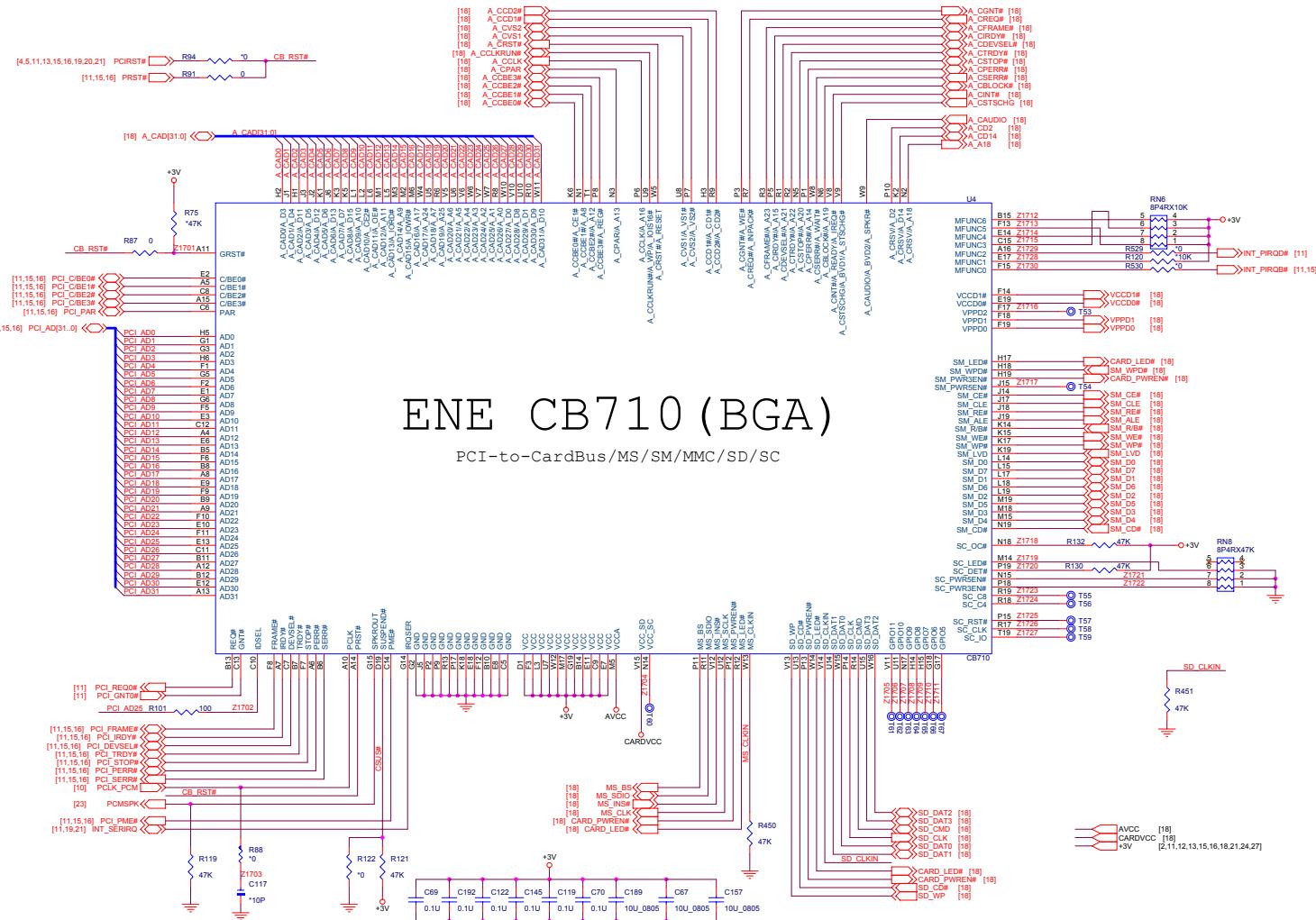


B. T2XOC Schematics

## Schematic Diagrams

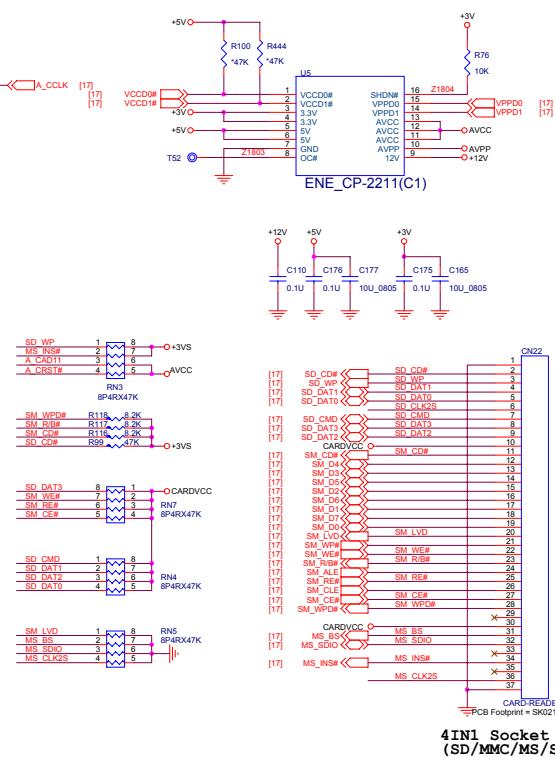
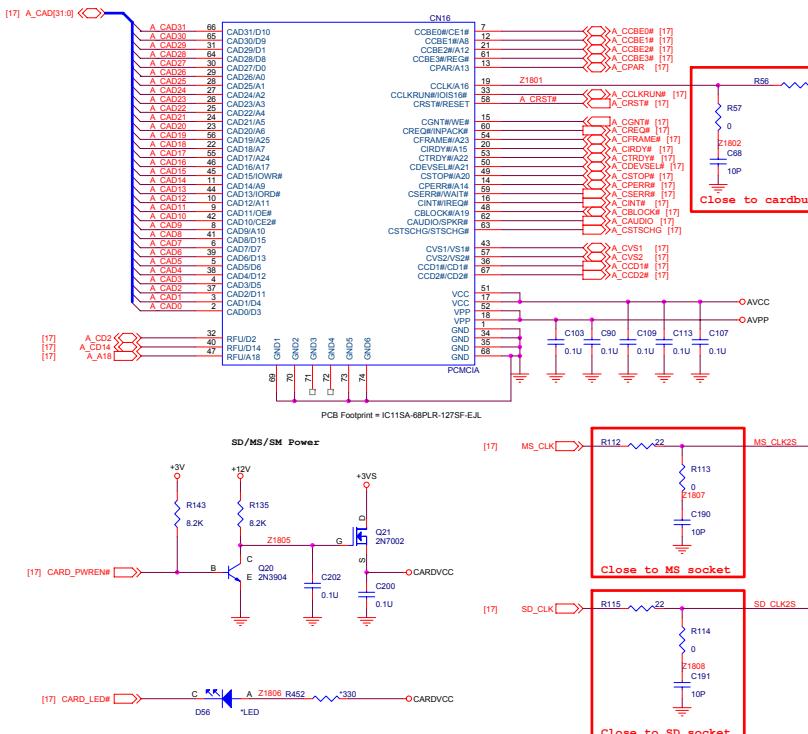
Sheet 17 of 31  
PCMCIA ENE CB710

# **PCMCIA ENE CB710**



B - 18 PCMCIA ENE CB710 (71-T20C0-003)

# PCM Socket, 4 IN 1 Socket



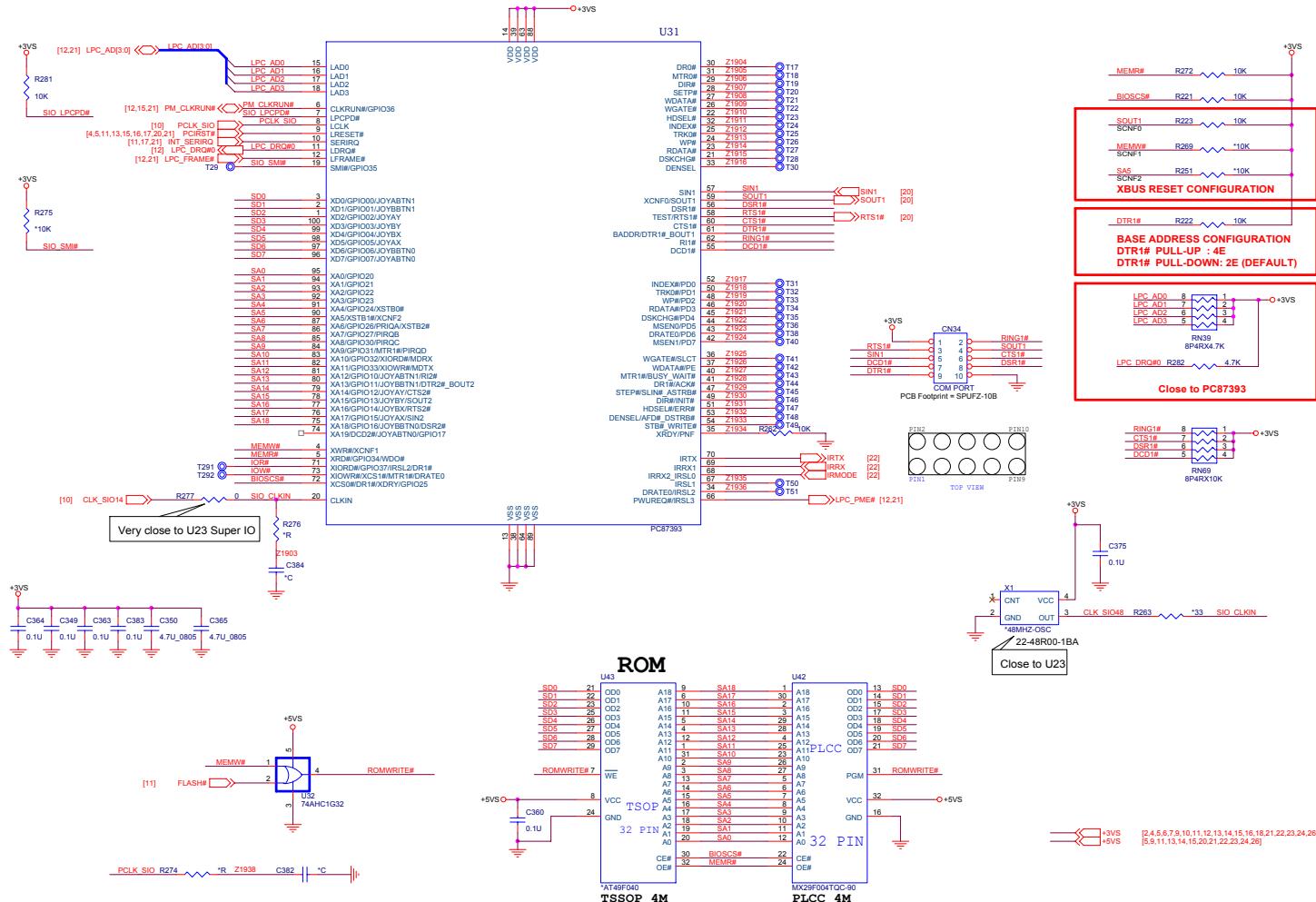
**Sheet 18 of 31**  
**PCM Socket, 4 IN 1**  
**Socket**

B. T2X0C Schematics

## Schematic Diagrams

# SIO, BIOS

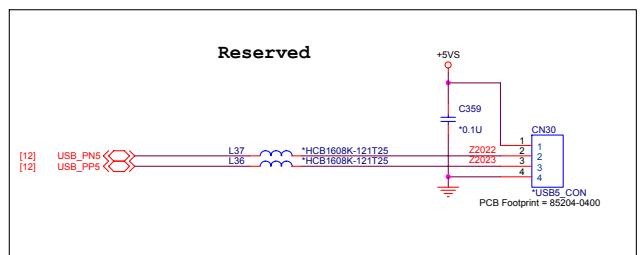
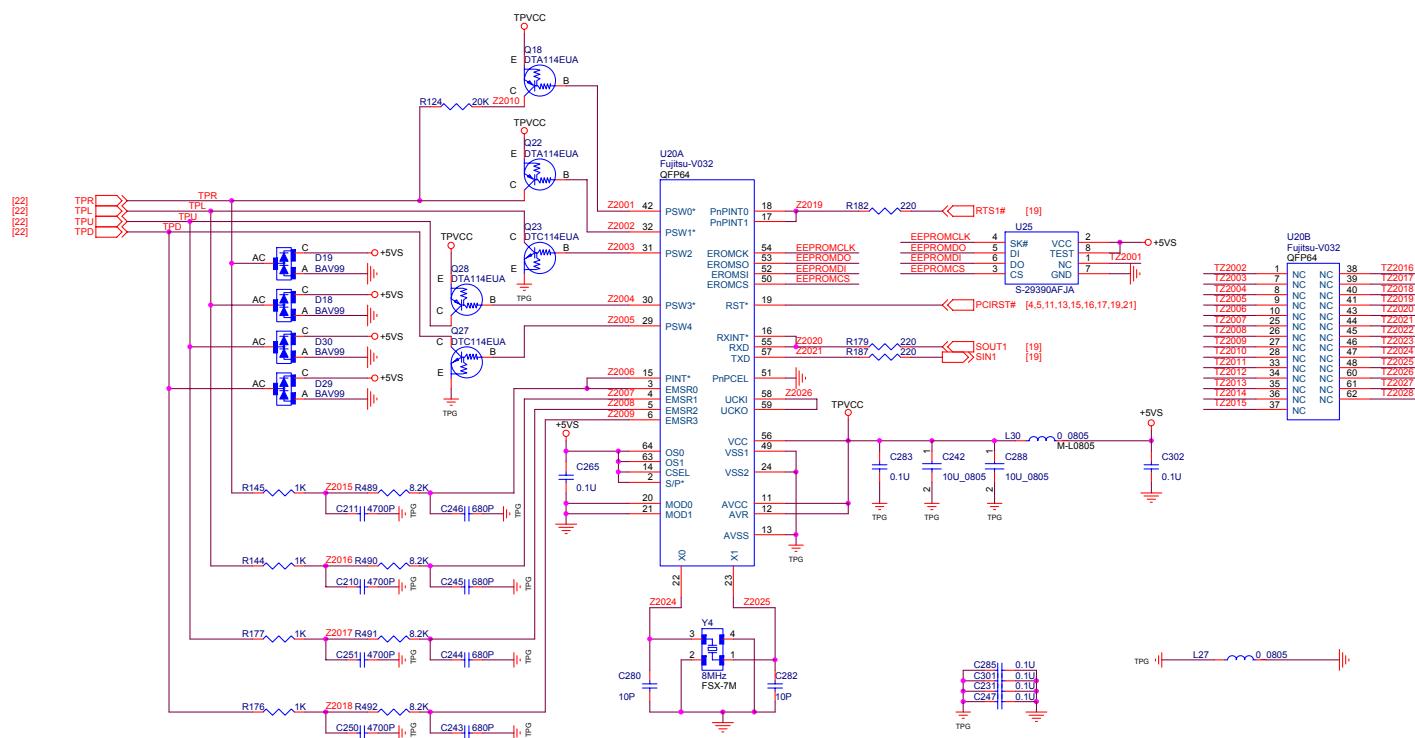
**Sheet 19 of 31**  
**SIO, BIOS**



B - 20 SIO, BIOS (71-T20C0-003)

## Touch Panel

Sheet 20 of 31  
Touch Panel

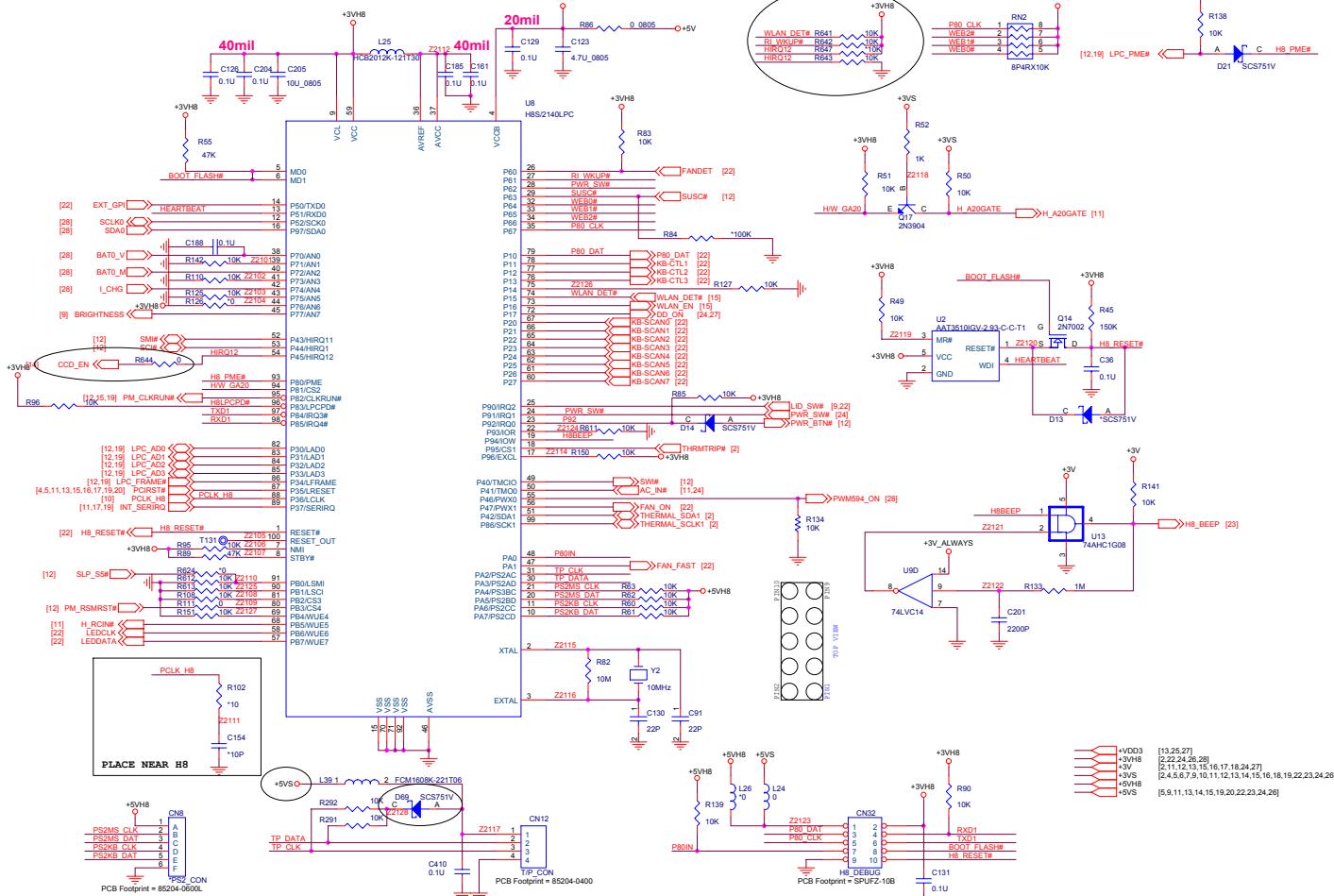


## B. T2X0C Schematics

### Schematic Diagrams

## Hitachi H8S

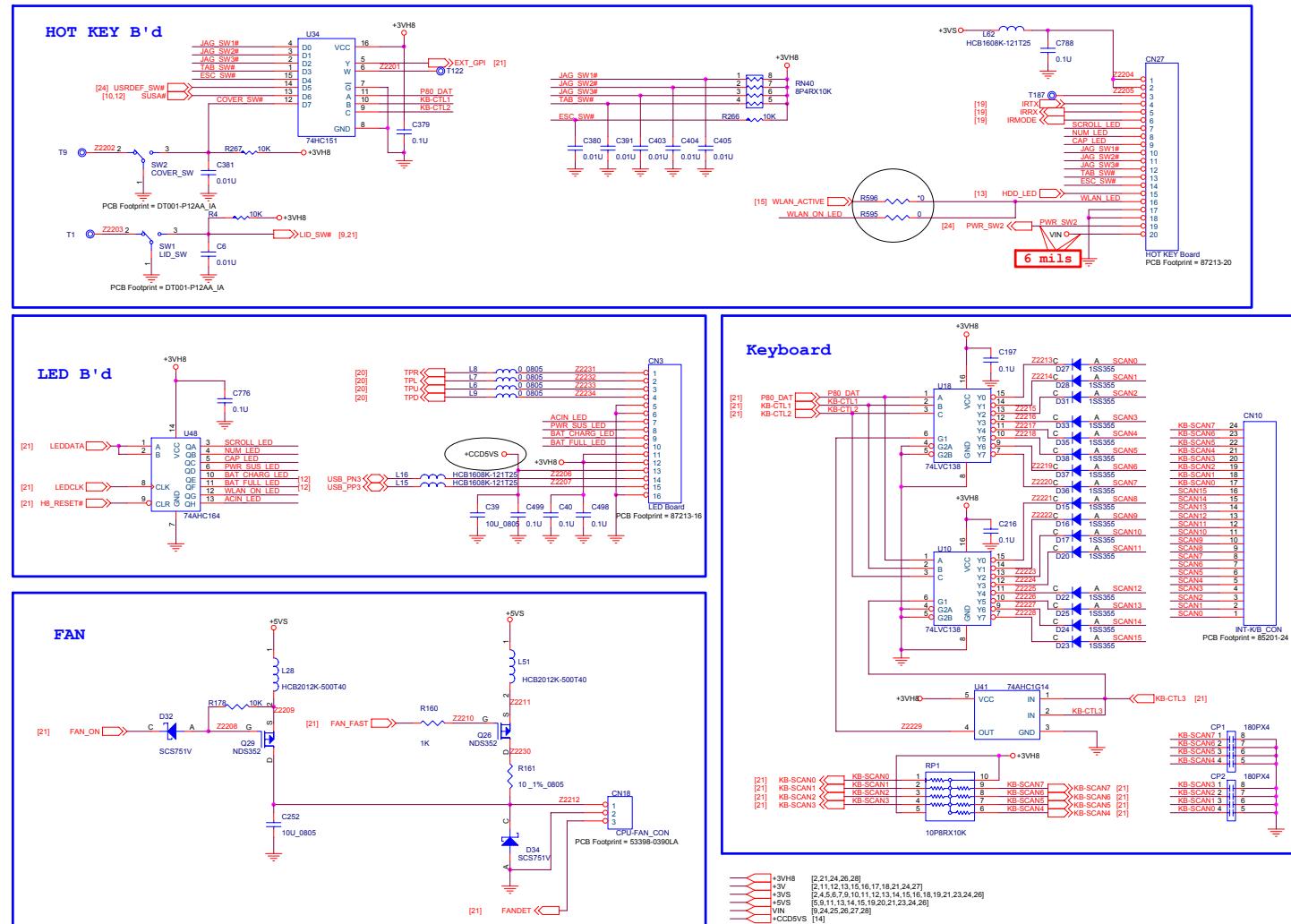
Sheet 21 of 31  
Hitachi H8S



B - 22 Hitachi H8S (71-T20C0-003)

# LED B'd, HOT KEY B'd, FAN, K/B

Sheet 22 of 31  
LED B'd, HOT KEY  
B'd, FAN, K/B

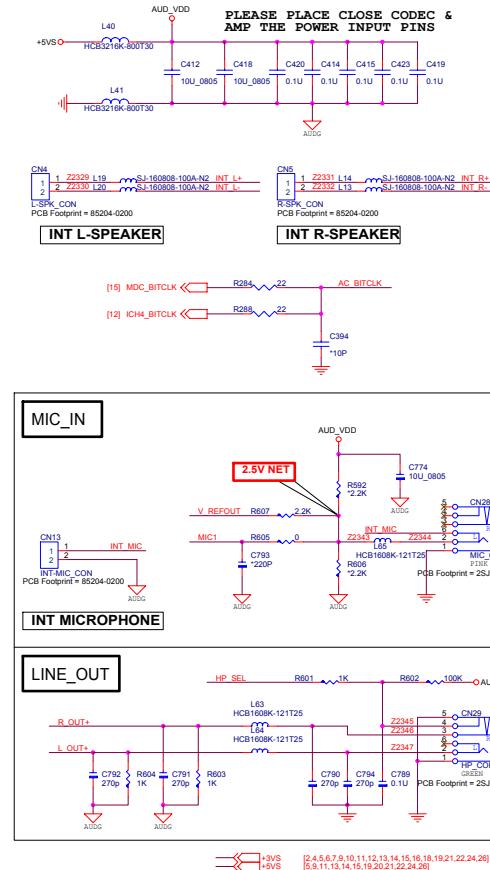
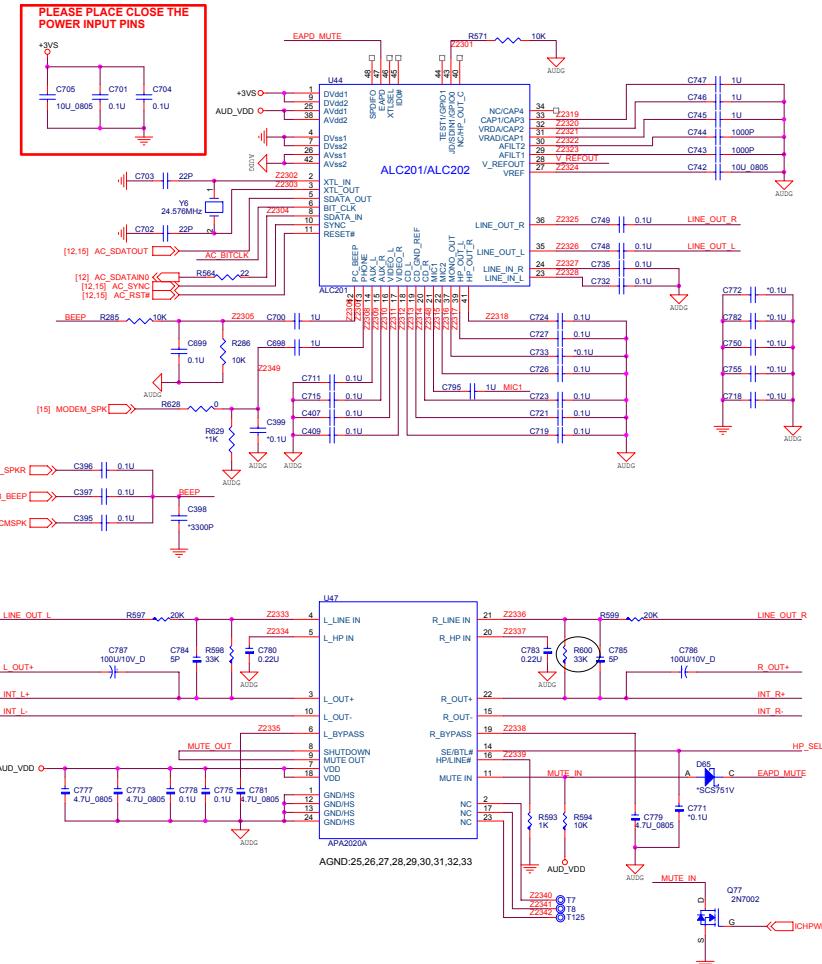


## B. T2X0C Schematics

### Schematic Diagrams

## CODEC, AMP

Sheet 23 of 31  
CODEC, AMP

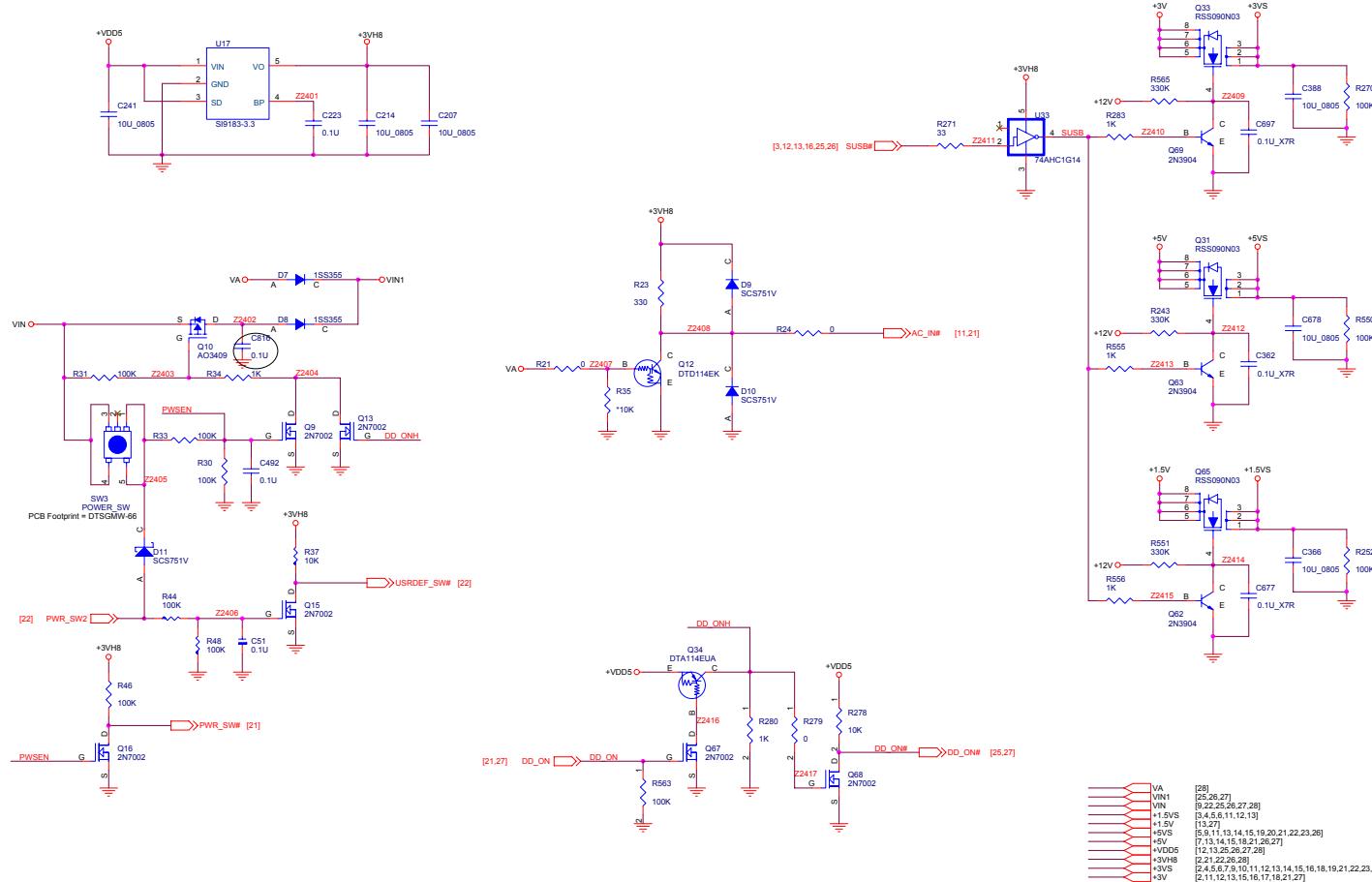


B - 24 CODEC, AMP (71-T20C0-003)

## Schematic Diagrams

**+3VS, +5VS**

Sheet 24 of 31  
+3VS, +5VS



B. T2X0C Schematics

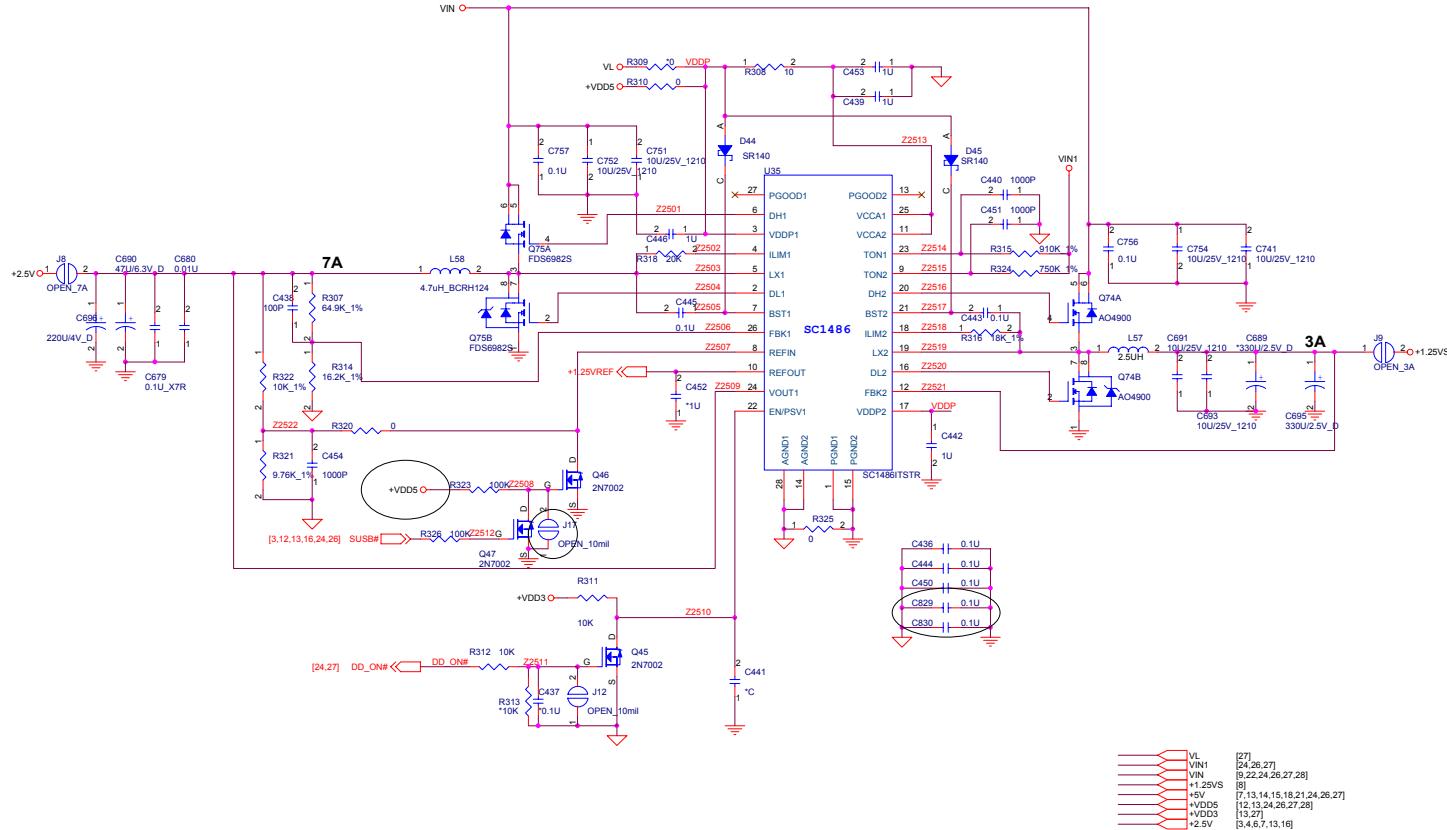
+3VS, +5VS (71-T20C0-003) B - 25

## B. T2X0C Schematics

### Schematic Diagrams

**+2.5V, +1.25V, 1.5V**

**Sheet 25 of 31**  
**+2.5V, +1.25V, 1.5V**

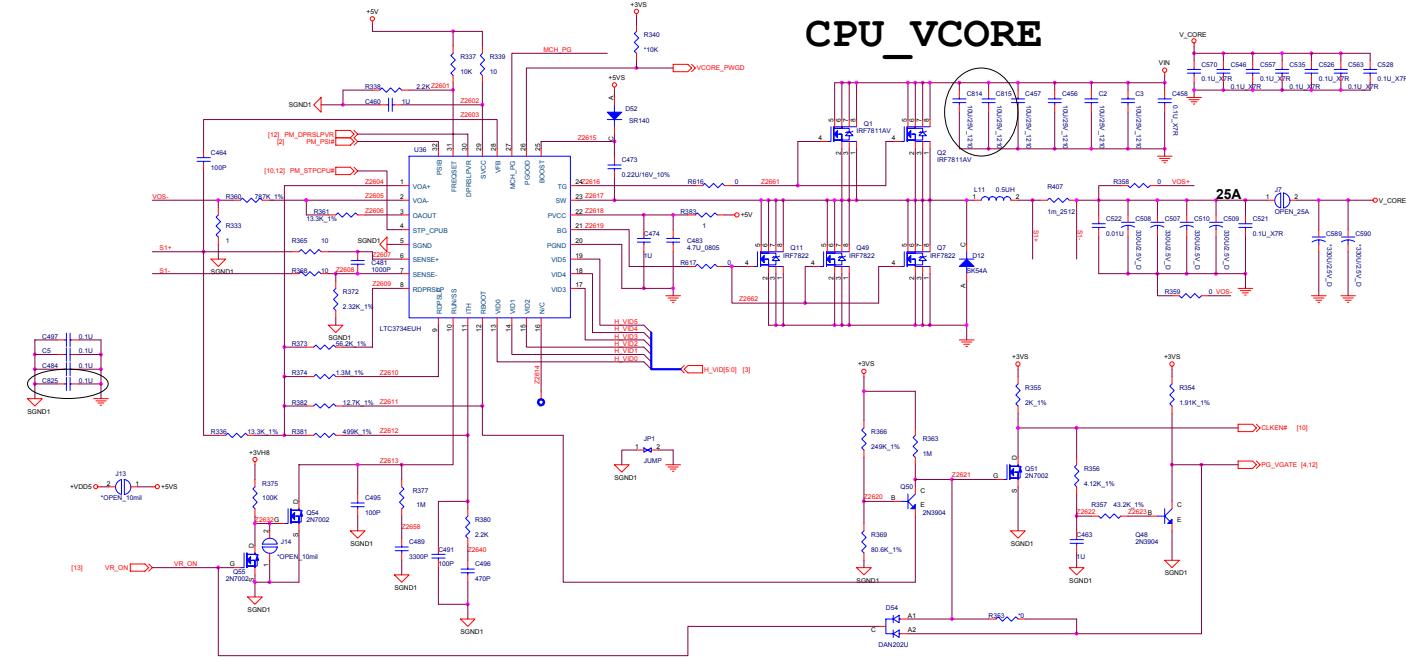


**B - 26 +2.5V, +1.25V, 1.5V (71-T20C0-003)**

<b>VL</b>	[24, 26, 27]
<b>VIN</b>	[22, 24, 26, 27, 28]
<b>[8]</b>	
<b>+1.25VS</b>	[7, 13, 14, 15, 18, 21, 24, 26, 27]
<b>+1.5V</b>	[12, 13, 24, 26, 27, 28]
<b>VDD5</b>	[12, 27]
<b>+VDD3</b>	[3, 4, 6, 7, 13, 16]
<b>+2.5V</b>	

### V\_CORE/ +VCCP/ +1.2VS

#### CPU\_VCORE

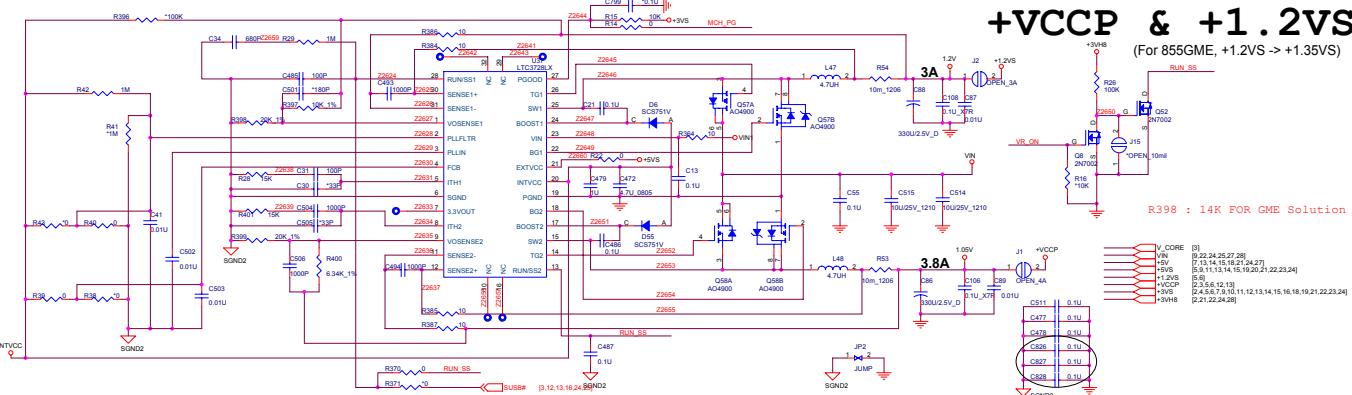


Sheet 26 of 31  
V\_CORE/ VCCP/  
+1.2VS

### B. T2X0C Schematics

#### +VCCP & +1.2VS

(For 855GME, +1.2VS > +1.35VS)

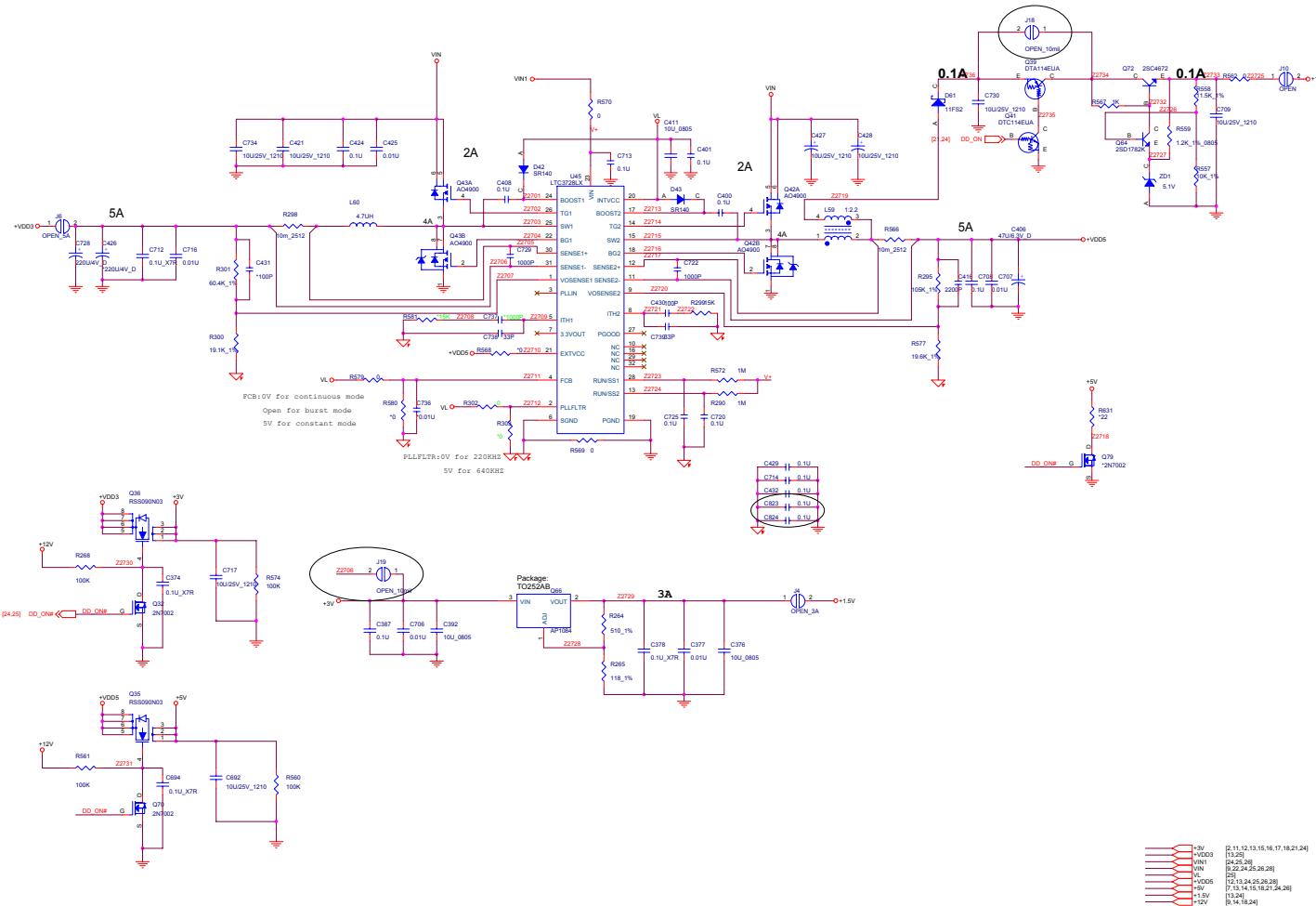


## B. T2X0C Schematics

### Schematic Diagrams

### 5V, 3.3V, +1.2, 1.5V

Sheet 27 of 31  
5V, 3.3V, +1.2V, 1.5V

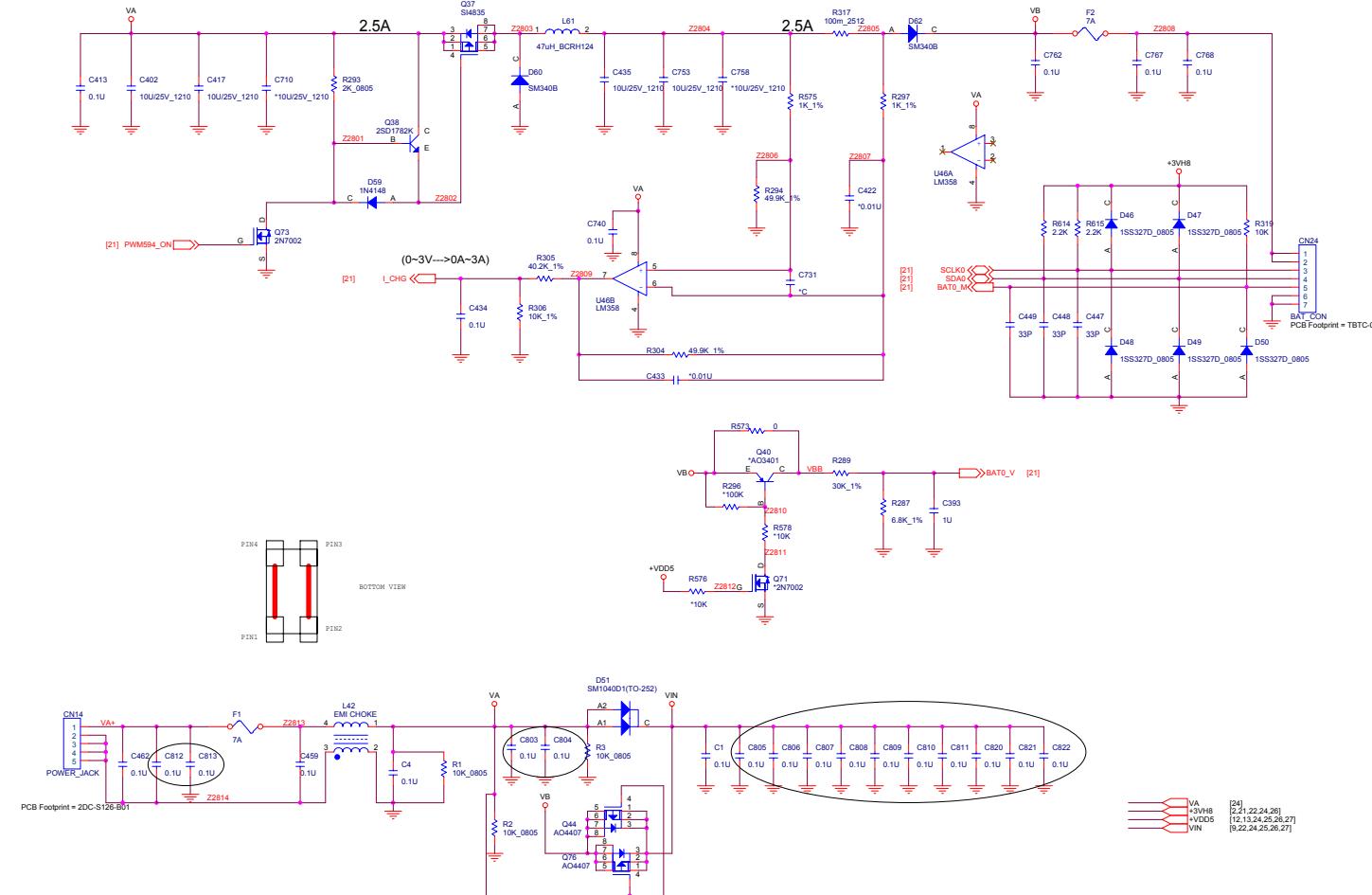


B - 28 5V, 3.3V, +1.2, 1.5V (71-T20C0-003)

3V	0, 1, 2, 13, 15, 16, 17, 18, 21, 24
VDD3	13, 26
VIN1	24, 25, 26
VIN2	19, 20, 29
VIN3	25
5V	13, 24, 25, 26, 28
9V	7, 13, 14, 15, 18, 21, 24, 26
12V	9, 14, 16, 24

## Charger

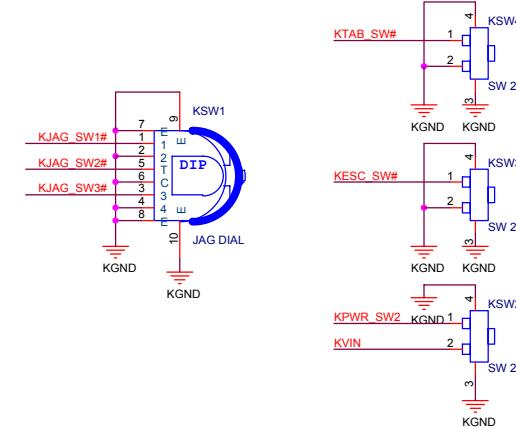
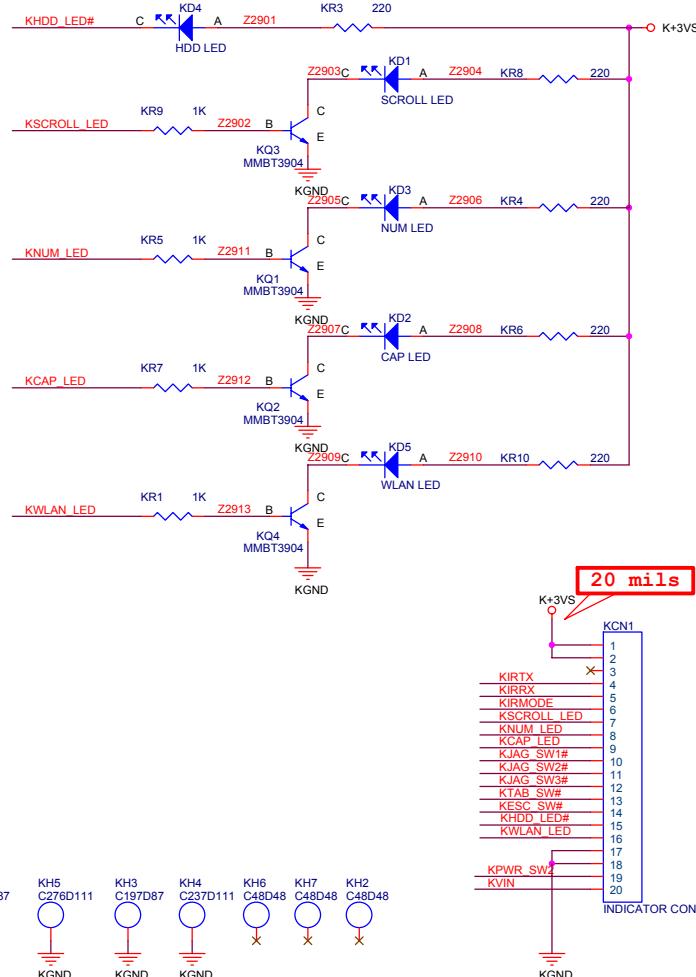
Sheet 28 of 31  
Charger



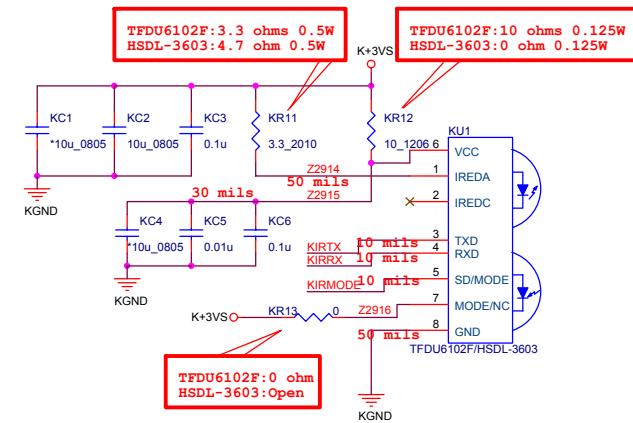
## Schematic Diagrams

### Hot Key

Sheet 29 of 31  
Hot Key

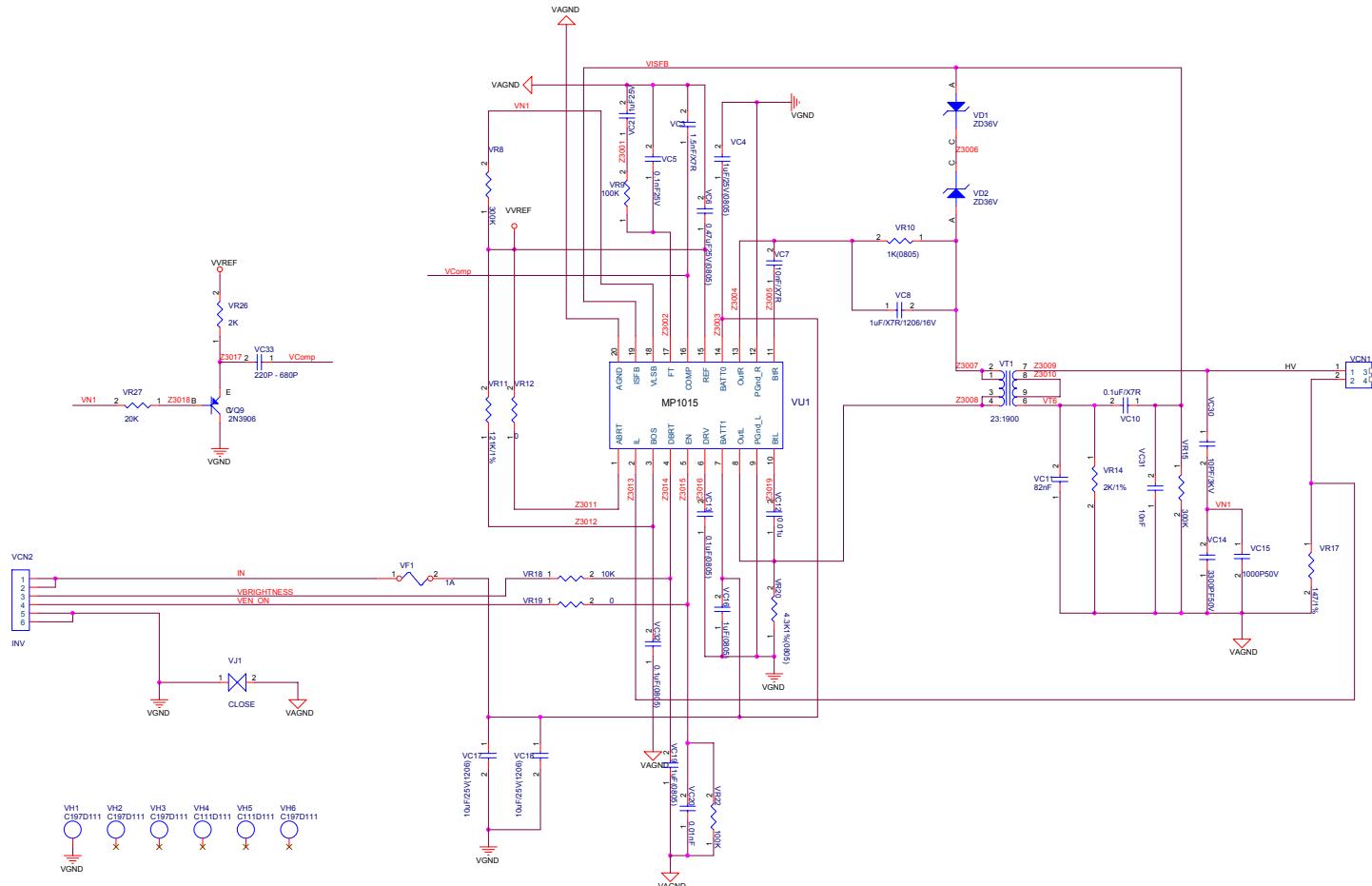


### IR Transceiver



## Inverter

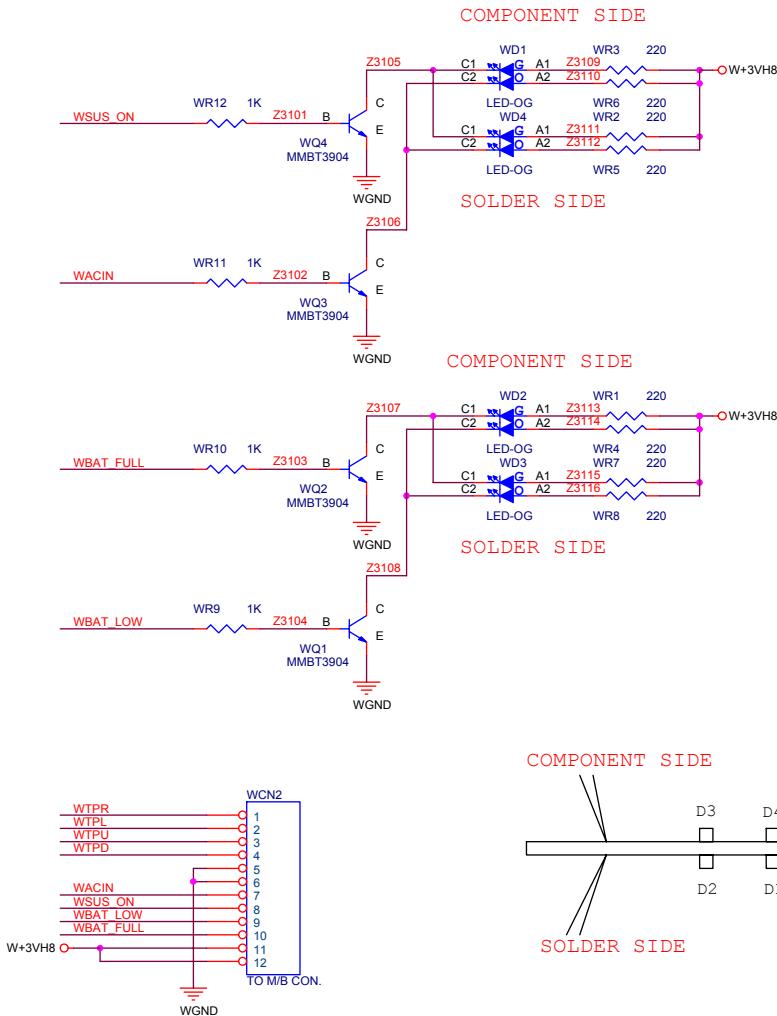
Sheet 30 of 31  
Inverter



## Schematic Diagrams

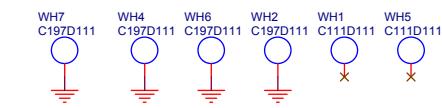
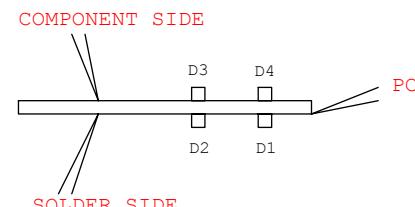
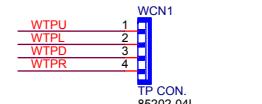
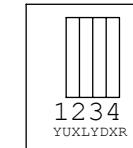
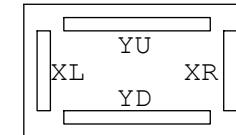
### LCD LED Board

Sheet 31 of 31  
LCD LED Board



SIGNAL	BAT CHARGING	BAT FULL	BAT FAIL	BAT LOW
BAT_FULL	LO	HI	HI	LO
BAT_LOW	HI	LO	HI	0.5Sec-HI 2.0Sec-LO
COLOR	ORANGE	GREEN	GREEN/ ORANGE	FLASH ORANGE

SIGNAL	POWER ON	ACIN	STR
SUS_ON	HI	LO	0.5Sec-HI 2.0Sec-LO
ACIN	LO	HI	LO
COLOR	GREEN	ORANGE	FLASH GREEN

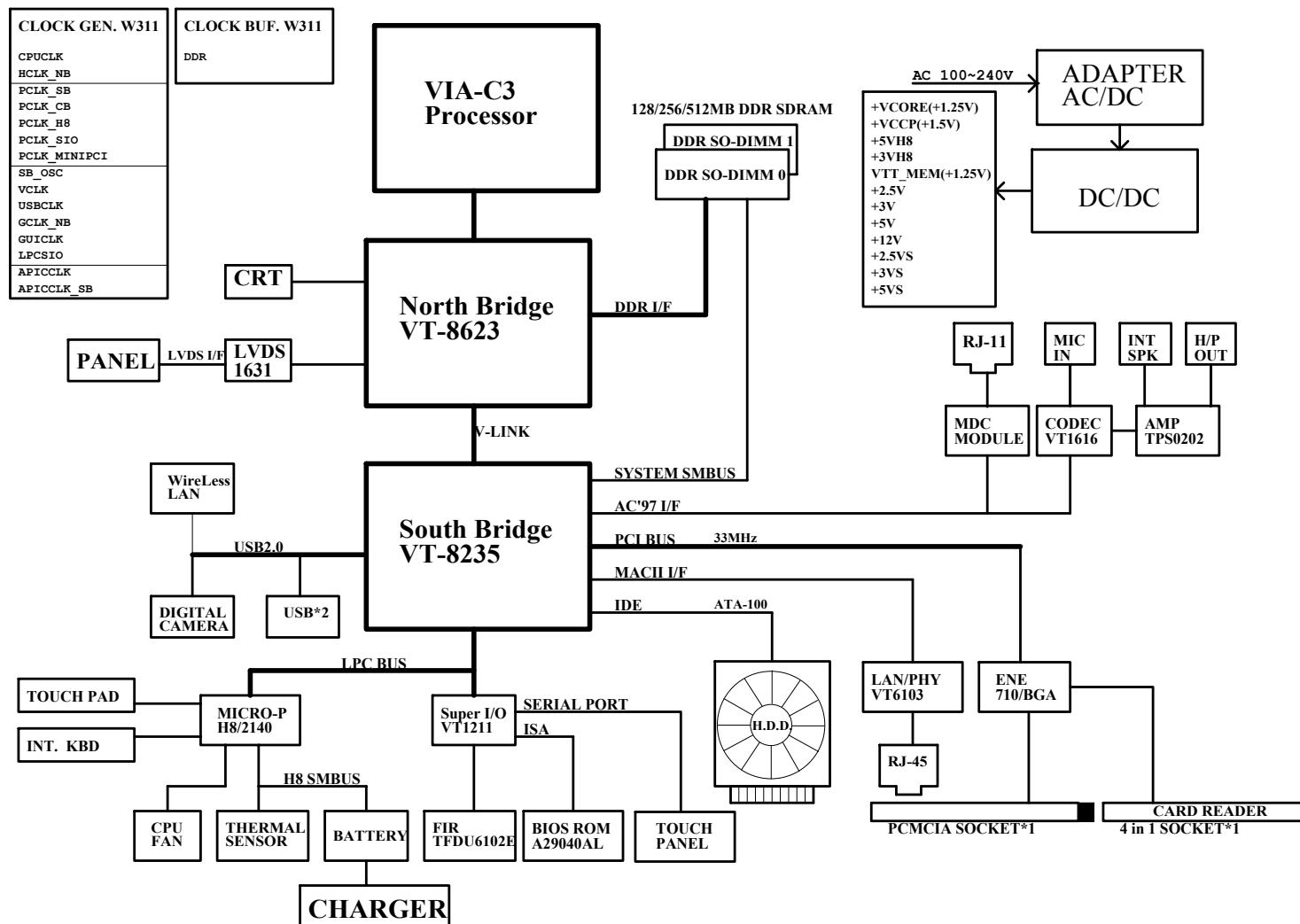


# Appendix C: T200V/T210V Schematic Diagrams

This appendix has circuit diagrams of the T200V/T210V computers PCB's:

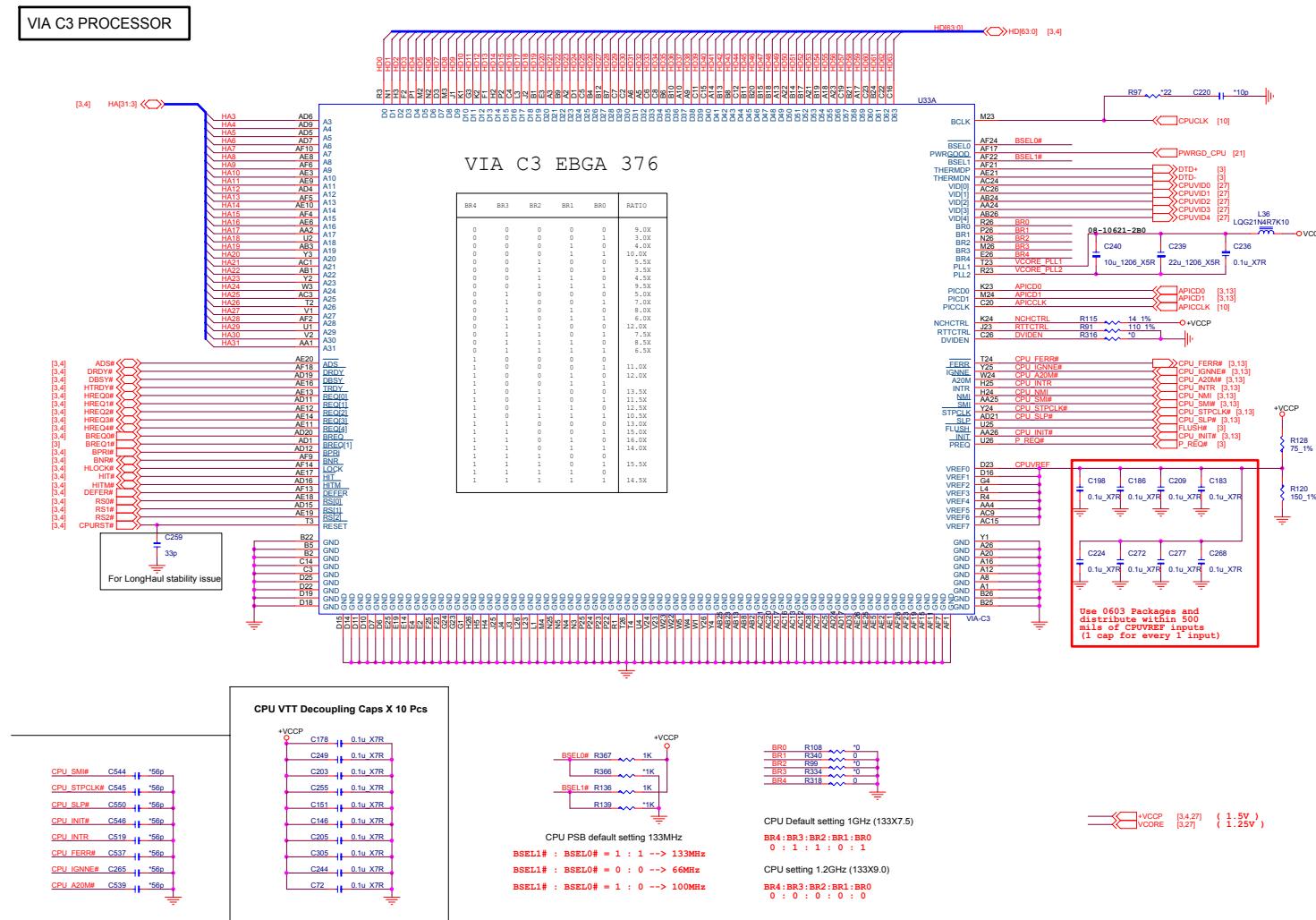
Diagram - Page	Diagram - Page
<i>System Block Diagram - Page C - 2</i>	<i>HDD, MDC, BT, Indicator, WLAN - Page C - 16</i>
<i>VIA C3 (1 of 2) - Page C - 3</i>	<i>LAN PHY VT6103 - Page C - 17</i>
<i>VIA C3 (2 of 2) - Page C - 4</i>	<i>PCMCIA ENE CB710 - Page C - 18</i>
<i>VT8623 (1 of 3) - Page C - 5</i>	<i>PCM Socket, 4 In 1 Socket - Page C - 19</i>
<i>VT8623 (2 of 3) - Page C - 6</i>	<i>SIO, BIOS, FIR - Page C - 20</i>
<i>VT8623 (3 of 3) - Page C - 7</i>	<i>H8S / 2104LPC - Page C - 21</i>
<i>DDR SO-DIMM - Page C - 8</i>	<i>Fan, CRT, Inverter, DC, Power_GD - Page C - 22</i>
<i>DDR Termination - Page C - 9</i>	<i>Audio Codec VT1616 - Page C - 23</i>
<i>LVDS Transmitter, Panel I/F - Page C - 10</i>	<i>Touch Panel Controller - Page C - 24</i>
<i>Clock (W311 + W256) - Page C - 11</i>	<i>System Power 1 - Page C - 25</i>
<i>VT2835 (1 of 3) - Page C - 12</i>	<i>System Power 2 - Page C - 26</i>
<i>VT2835 (2 of 3) - Page C - 13</i>	<i>System Power 3 - Page C - 27</i>
<i>VT2835 (3 of 3) - Page C - 14</i>	<i>CPU VCORE - Page C - 28</i>
<i>All USB 2.0 Port - Page C - 15</i>	<i>Charger - Page C - 29</i>

Table C - 1  
Schematic Diagram

**Schematic Diagrams****Sheet 1 of 29  
System Block Diagram****System Block Diagram**

## VIA C3 (1 of 2)

Sheet 2 of 29  
VIA C3 (1 of 2)  
Sheet 3 of 29



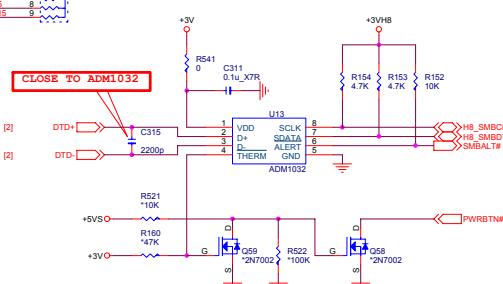
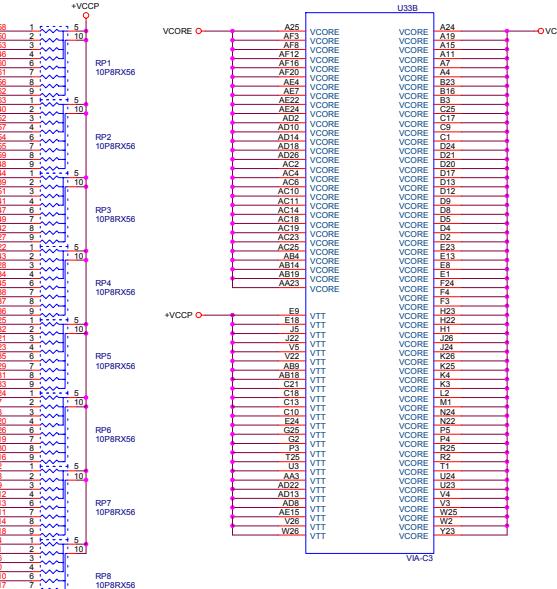
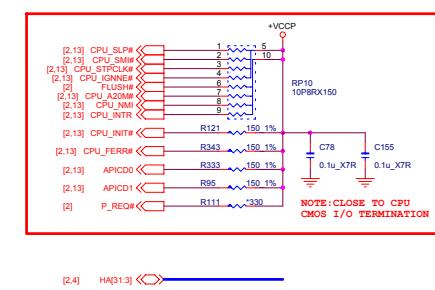
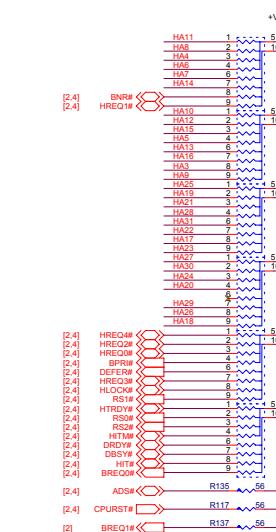
## Schematic Diagrams

### VIA C3 (2 of 2)

Sheet 4 of 29  
VIA C3 (2 of 2)

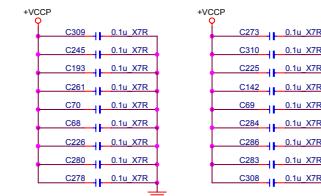
#### GTL+ PULL-UP RES NETWORK

The CLE266 add a feature for NB internal GTL pull-up, the internal pull-up strength is stronger than previous NB, so if enable the internal GTL pull-up, can remove the CPU GTL pull-up R-PACK except CPURST#.



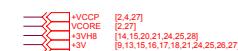
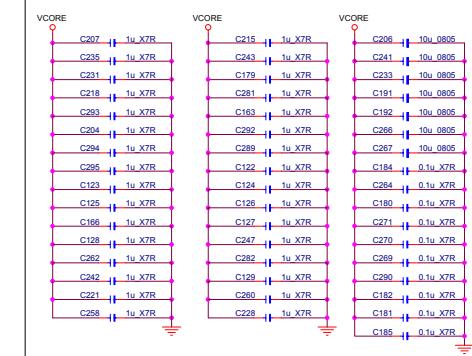
#### VTT Decoupling Cap. for GTL+ Pull-up R-PAK

(Place every decoupling capacitor for each R-pack.)



#### CPU VCORE Decoupling Cap.

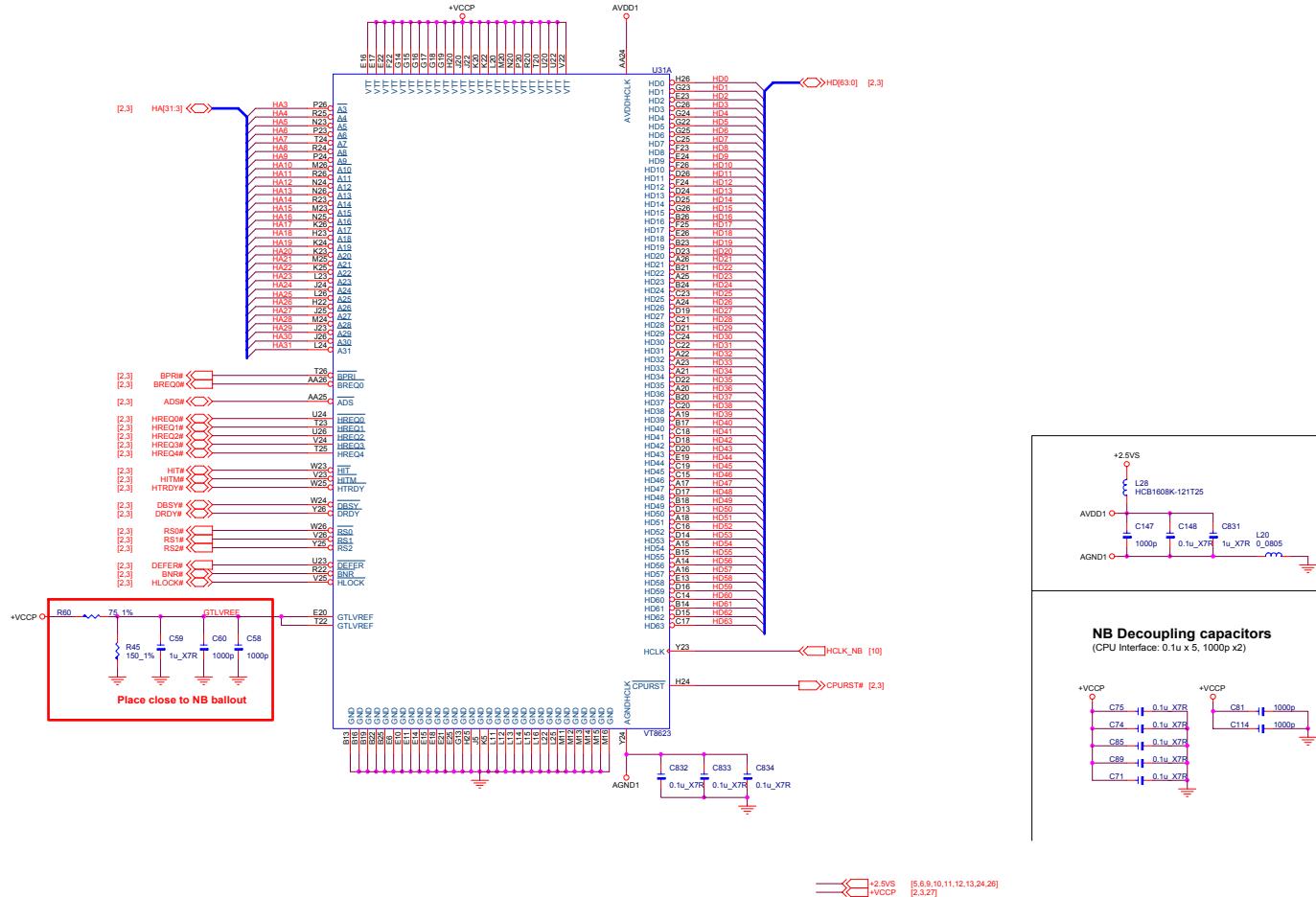
CPU VCORE Decoupling Caps: 10uF x 7, 1uF x 32, 0.1uF x 10



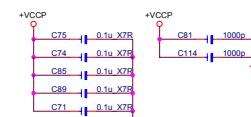
## VT8623 (1 of 3)

CLE266

Sheet 5 of 29  
VT8623 (1 of 3)



NB Decoupling capacitors  
(CPU Interface: 0.1u x 5, 1000p x2)



[2.5VS] +VCCP [5.6.9.10.11.12.13.24.26]  
[2.3.27]

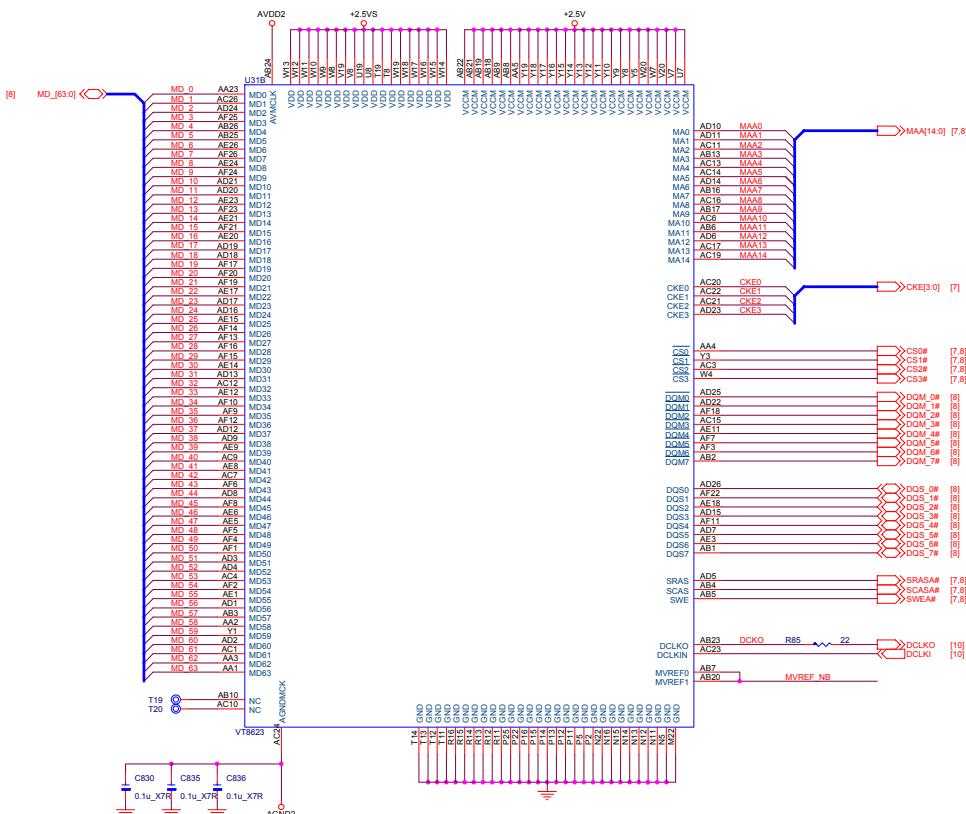
## C. T2X0V Schematics

### Schematic Diagrams

## VT8623 (2 of 3)

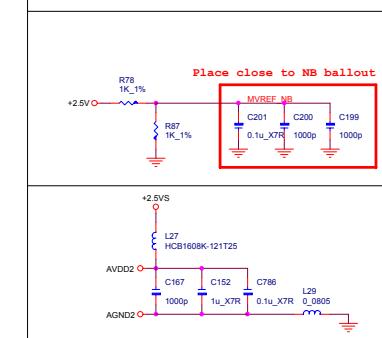
Sheet 6 of 29  
VT8623 (2 of 3)

**CLE266**

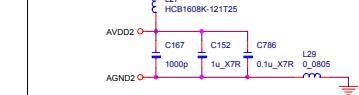


DCLK0 R88 ~22 C202 \*10p ||

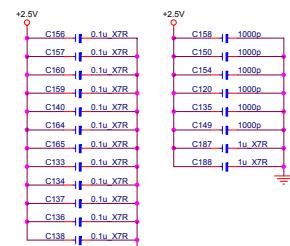
(Place near their respective balls of NB)



+2.5V  
R78 1k\_1%  
R87 1k\_1%  
C201  
C200  
C199  
0.1u\_XTR 1000p 1000p  
MVREF\_NB



**NB Decoupling capacitors**  
(Memory Interface: 1u x 2, 0.1u x 12, 1000p x 6)

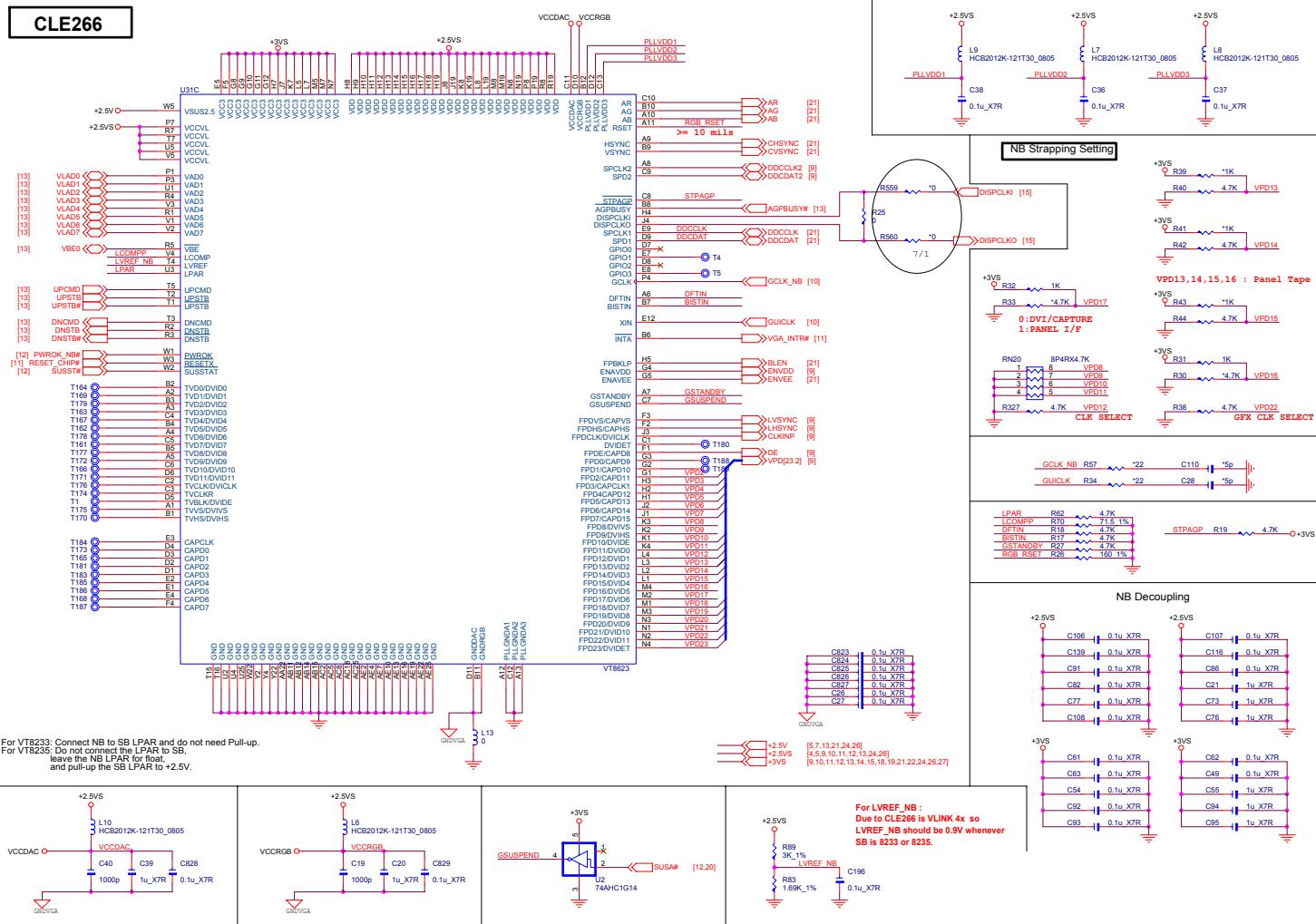


+2.5V  
+2.5VS [6.7,13,21,24,26]  
[4.6,9,10,11,12,13,24,26]

# Schematic Diagrams

VT8623 (3 of 3)

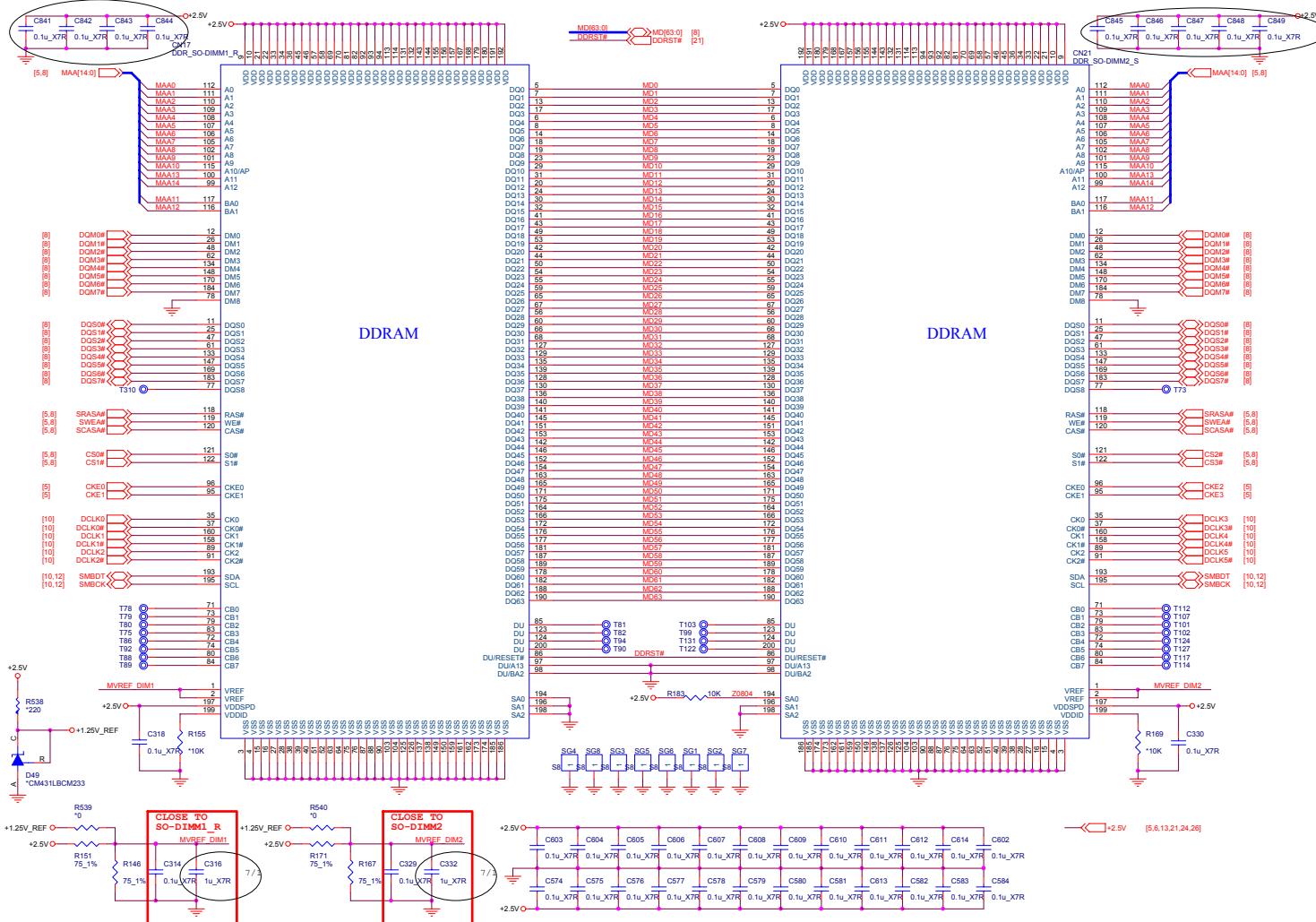
Sheet 7 of 29  
VT8623 (3 of 3)



## Schematic Diagrams

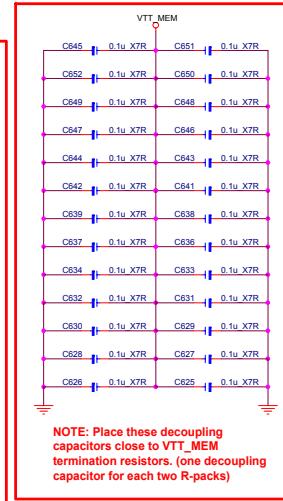
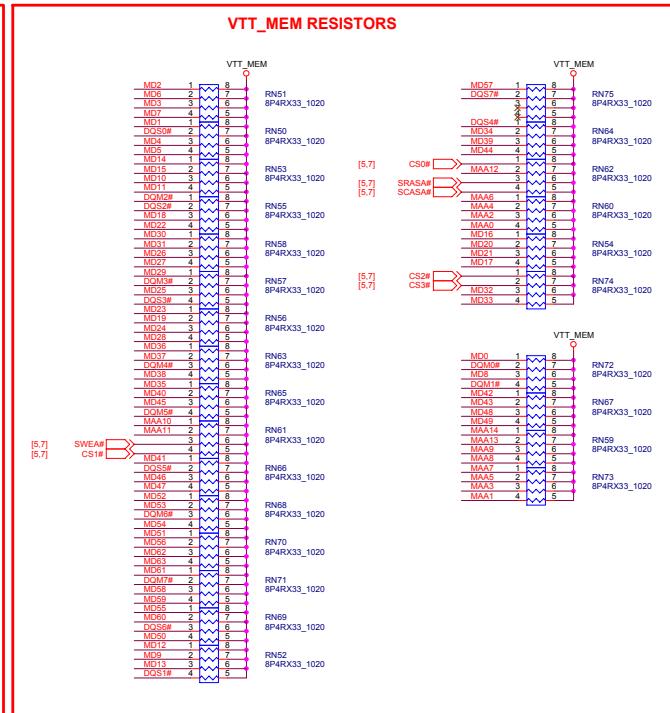
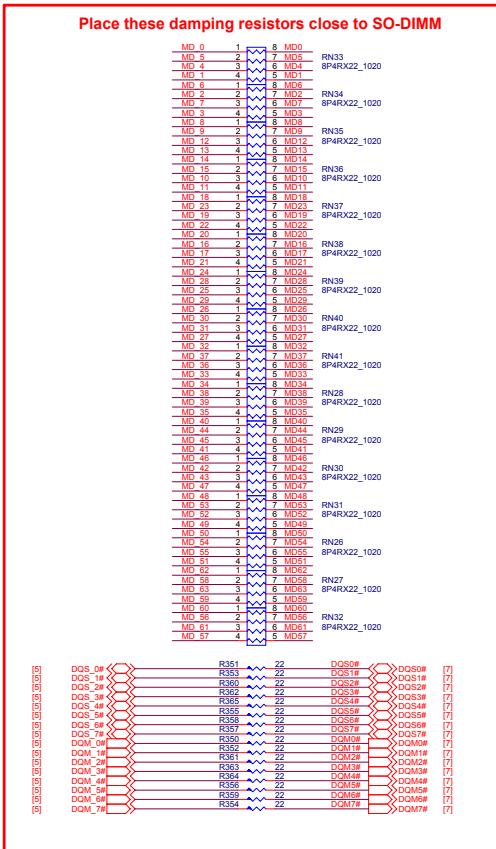
# DDR SO-DIMM

Sheet 8 of 29  
DDR SO-DIMM



## DDR Termination

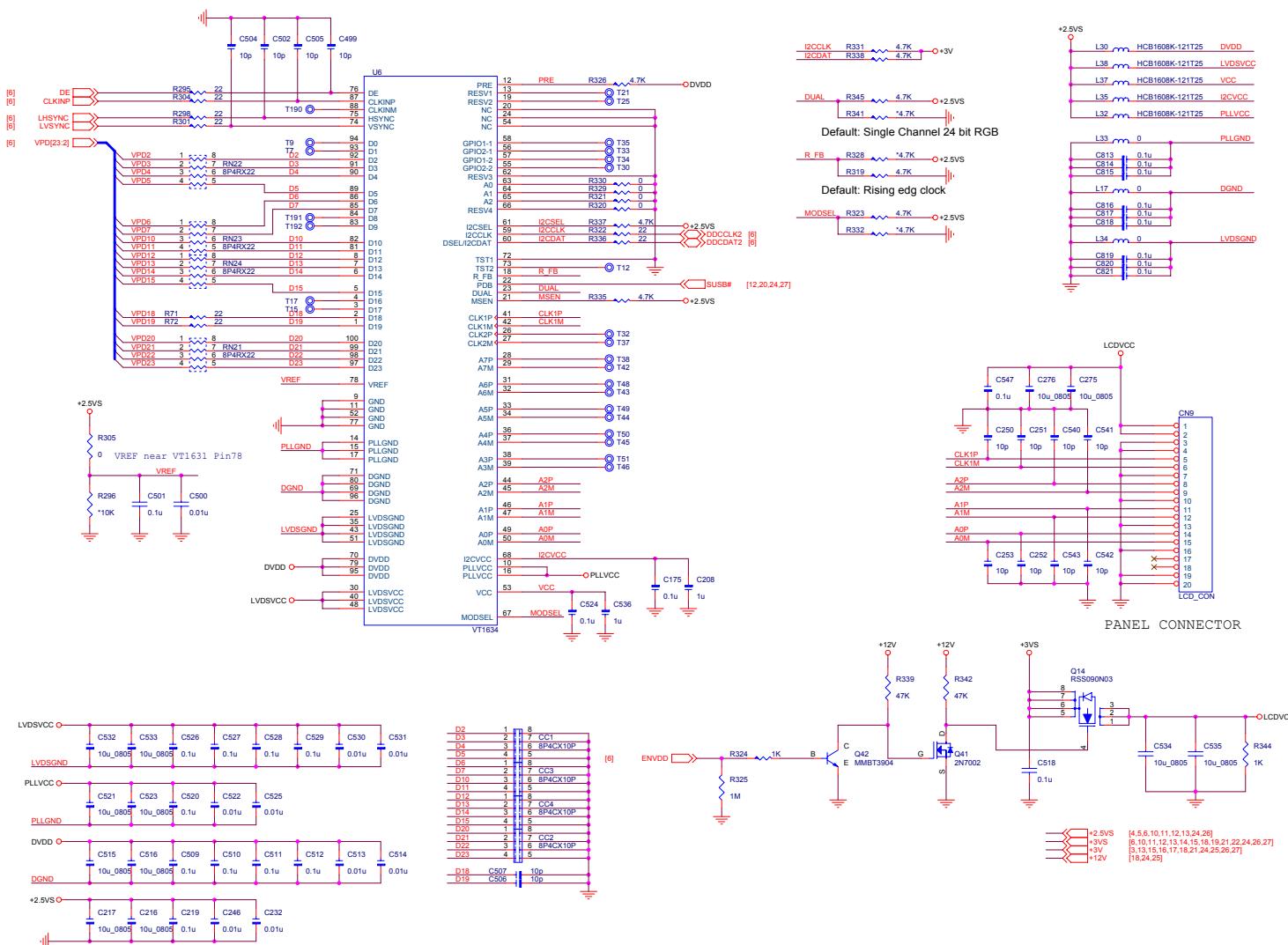
Sheet 9 of 29  
DDR Termination



## Schematic Diagrams

### LVDS Transmitter, Panel I/F

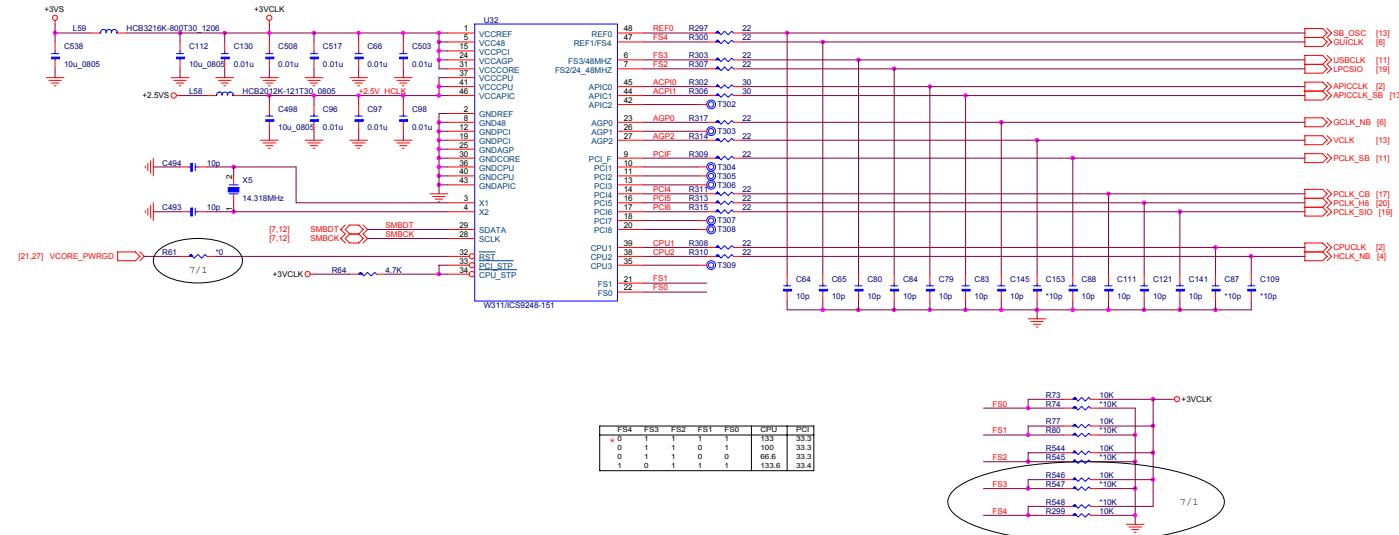
Sheet 10 of 29  
LVDS Transmitter,  
Panel I/F



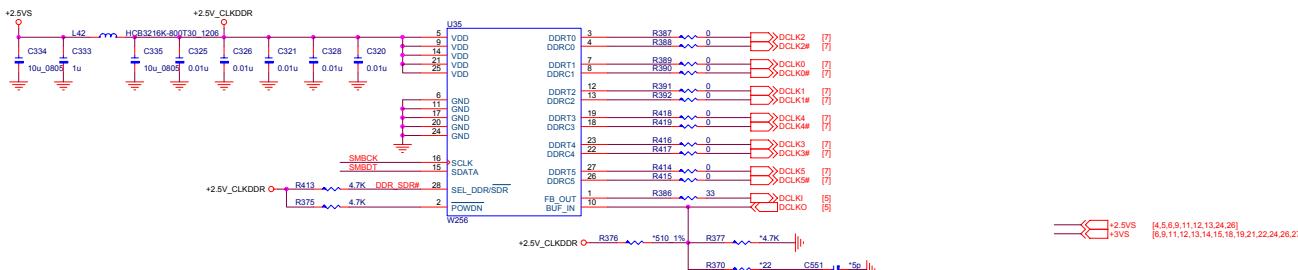
## Clock (W311 + W256)

Sheet 11 of 29  
Clock (W311 +  
W256)

**W311**



**W256**

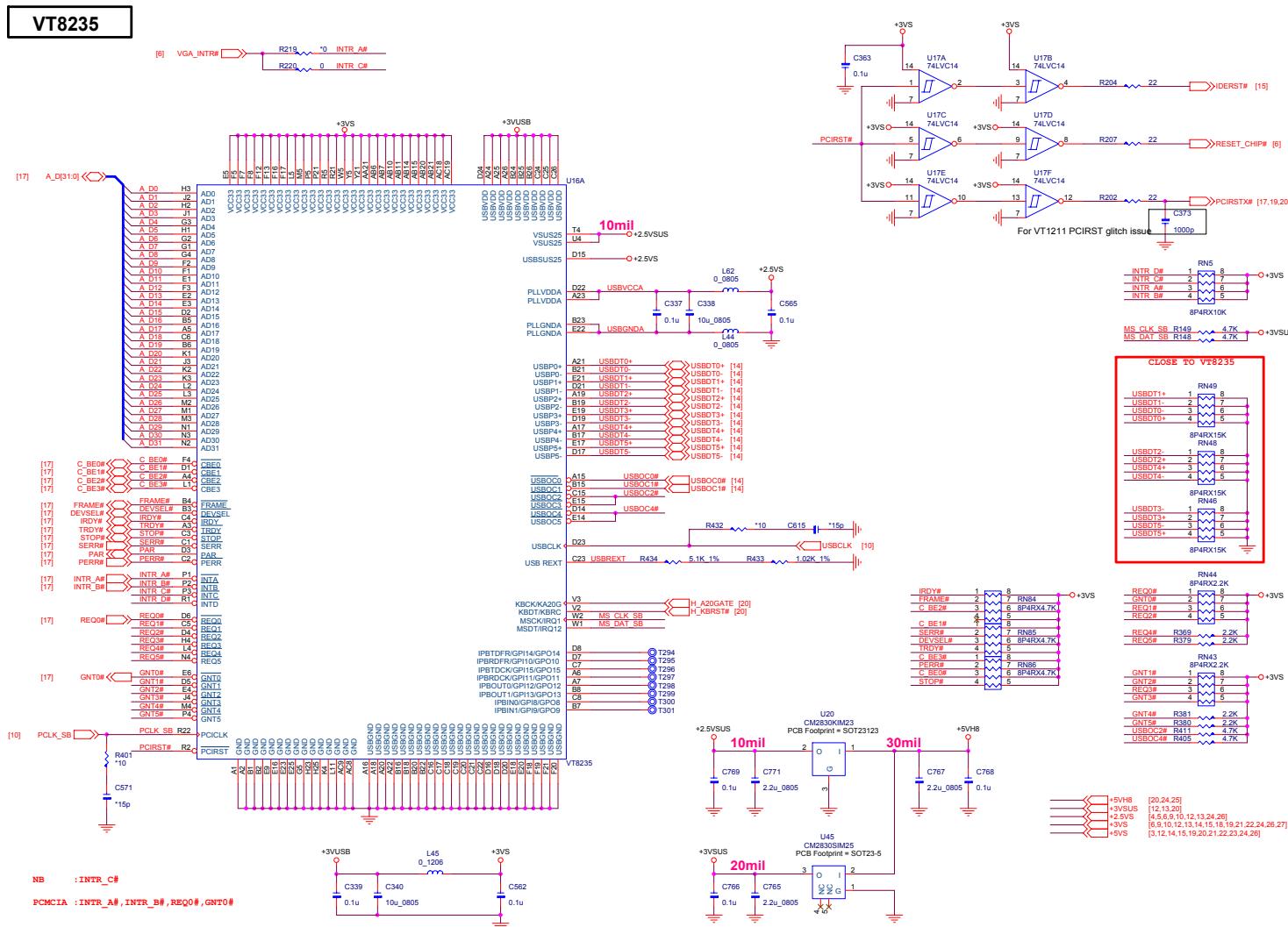


C. T2X0V Schematics

## Schematic Diagrams

VT2835 (1 of 3)

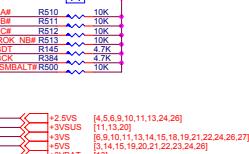
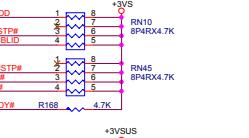
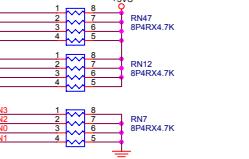
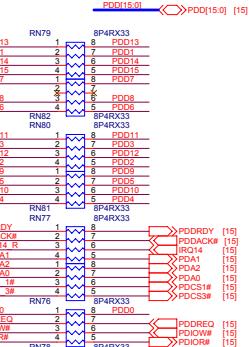
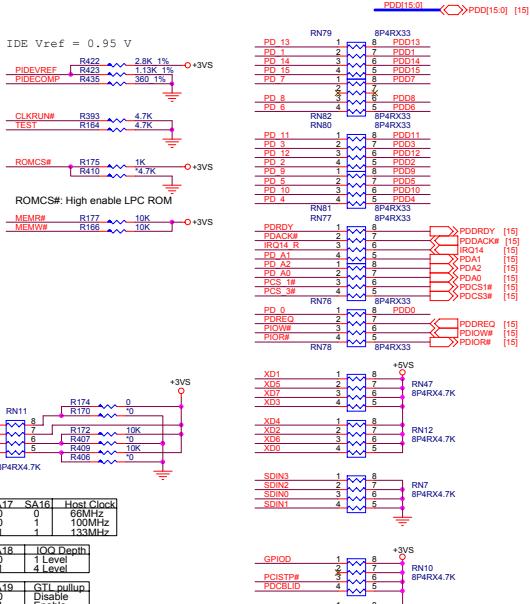
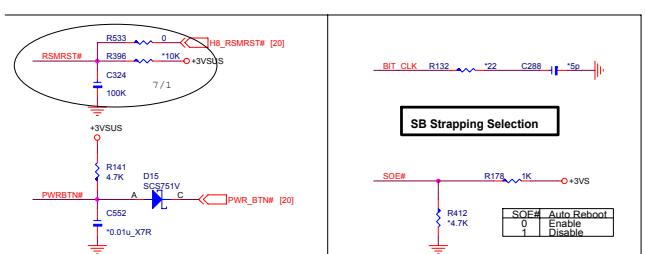
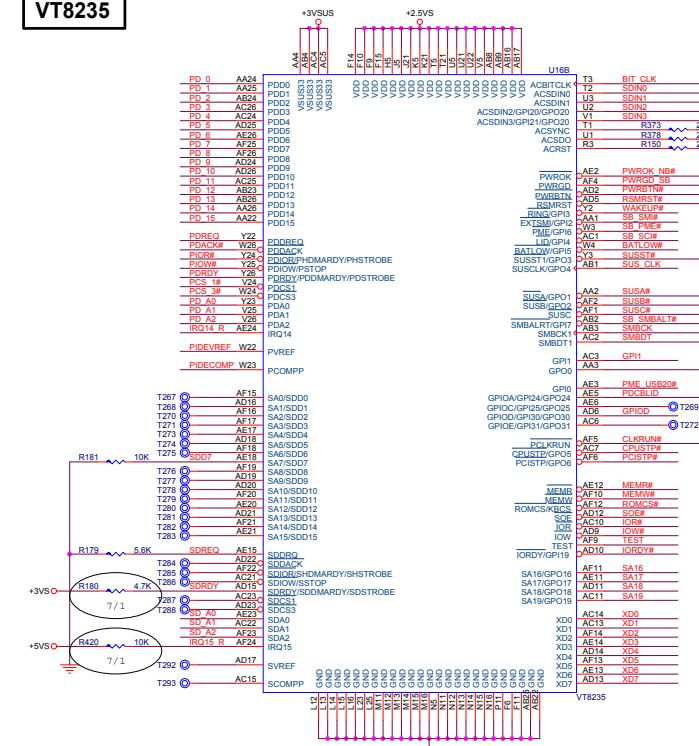
**Sheet 12 of 29**  
**VT2835 (1 of 3)**



## Schematic Diagrams

### VT2835 (2 of 3)

VT2835



Sheet 13 of 29  
VT2835 (2 of 3)

C. T2X0V Schematics

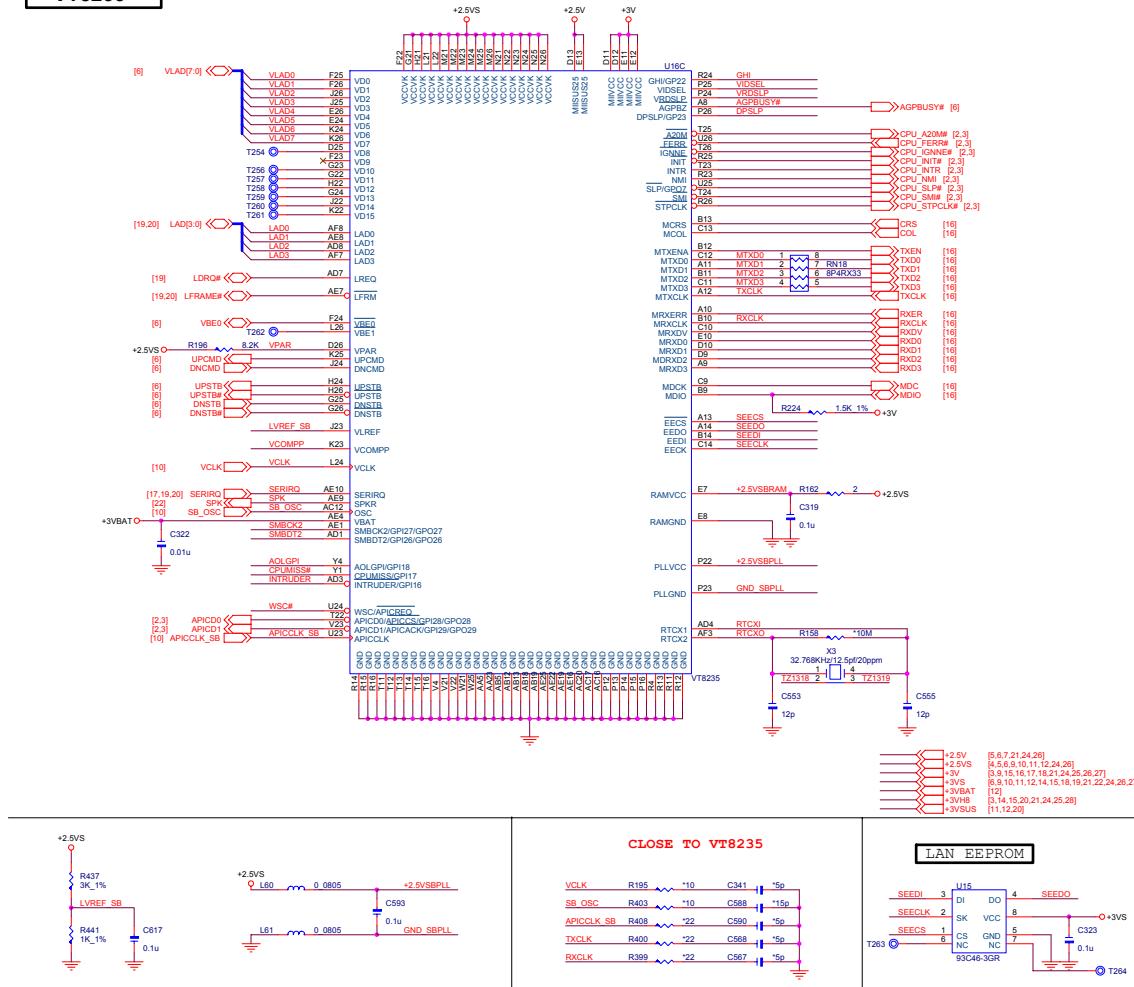
## C. T2X0V Schematics

### Schematic Diagrams

### VT2835 (3 of 3)

Sheet 14 of 29  
VT2835 (3 of 3)

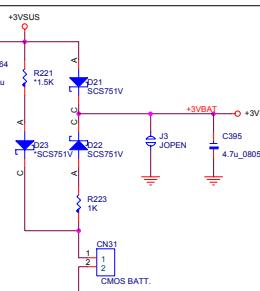
**VT2835**



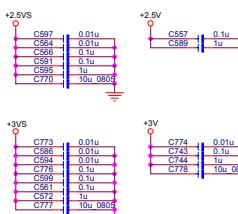
For VT2833A R (VCOMPP) change to 80/F

SPK R165 ~ 1K

Low: Enable CPU Frequency Strapping

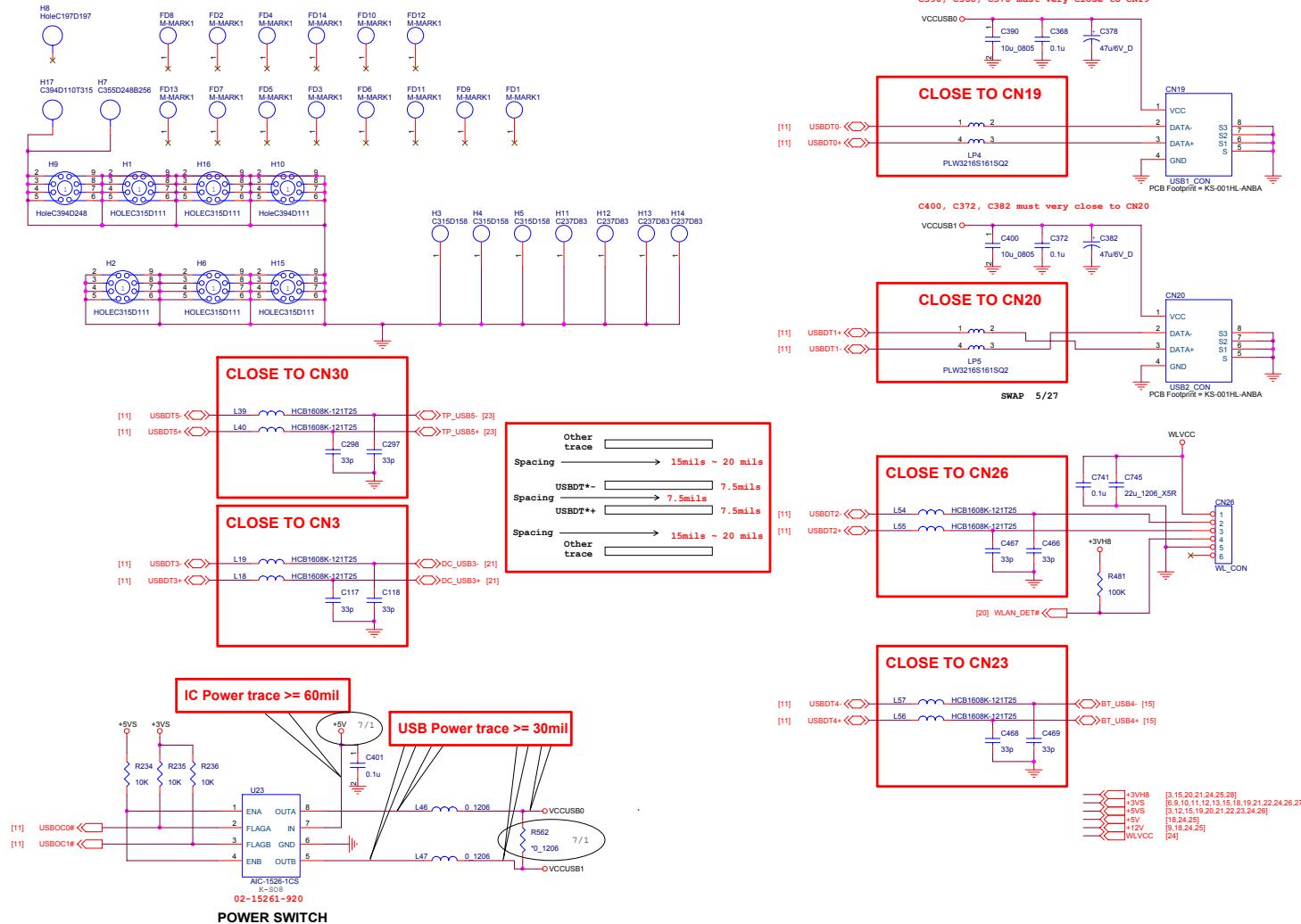


**SB Decoupling Cap.**



## All USB 2.0 Port

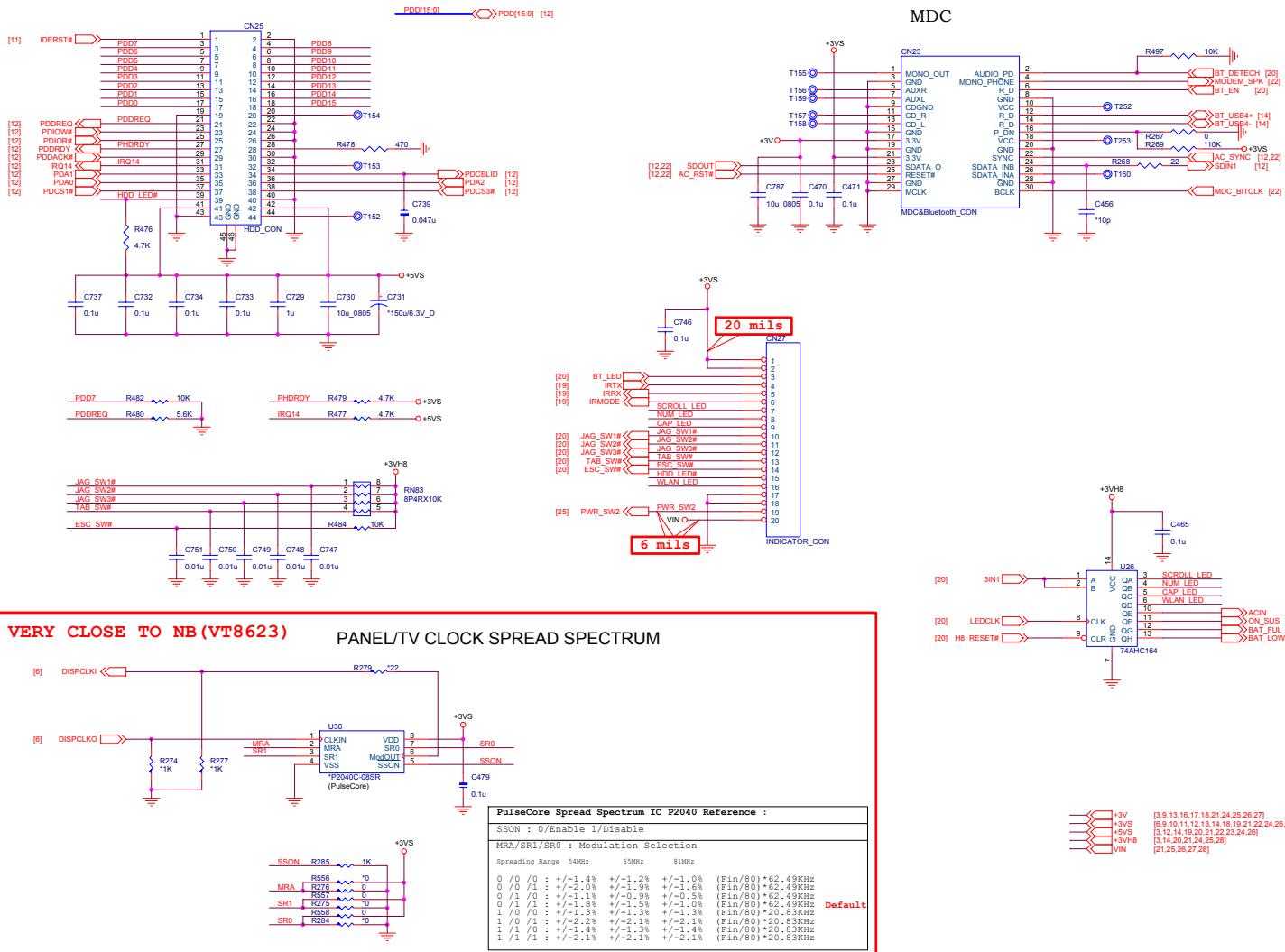
Sheet 15 of 29  
All USB 2.0 Port



## Schematic Diagrams

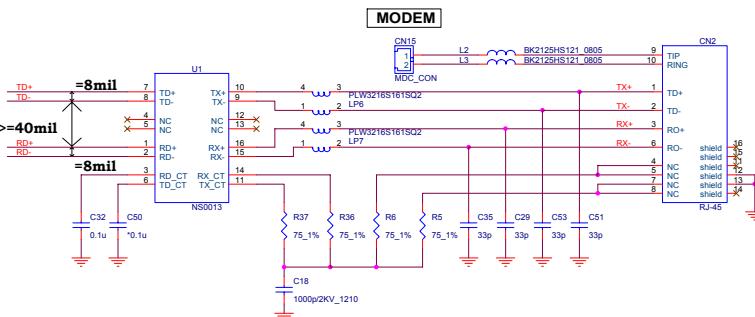
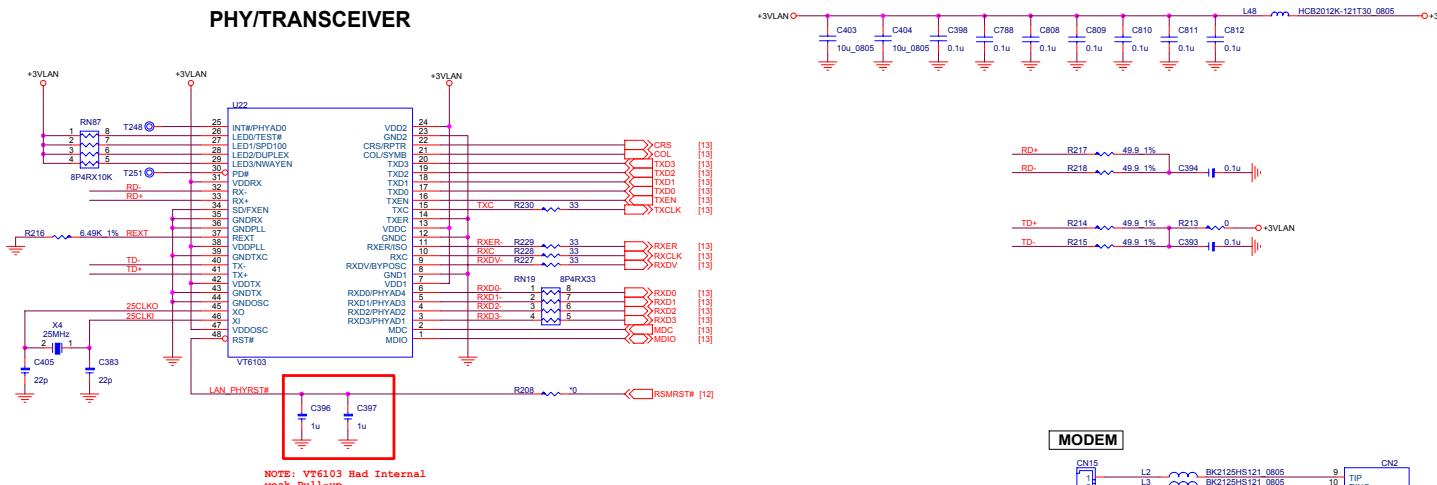
### HDD, MDC, BT, Indicator, WLAN

Sheet 16 of 29  
HDD, MDC, BT,  
Indicator, WLAN



## LAN PHY VT6103

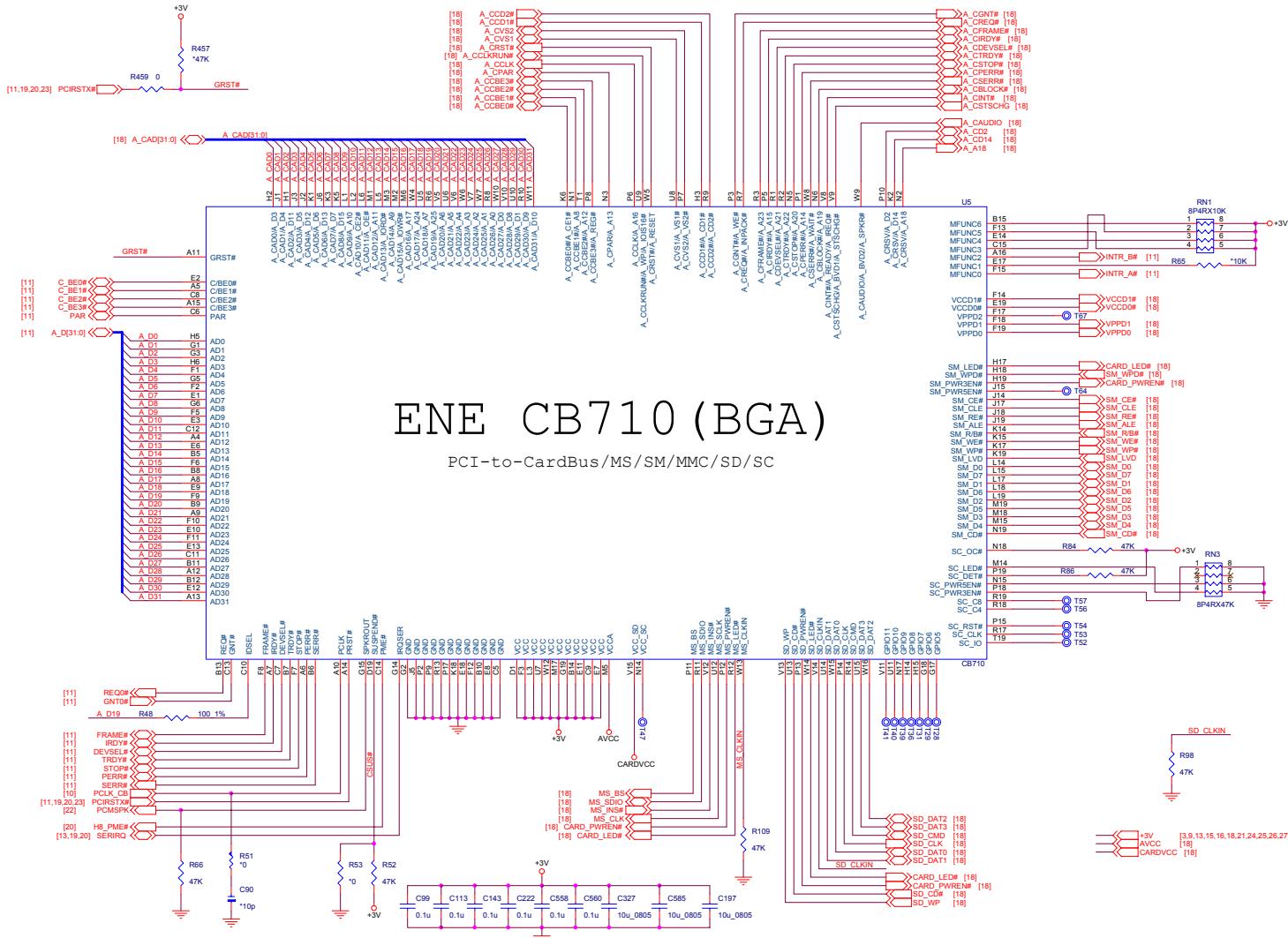
VT6103



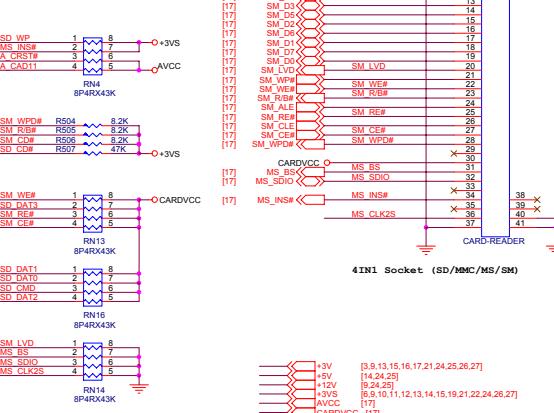
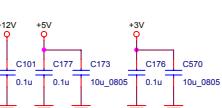
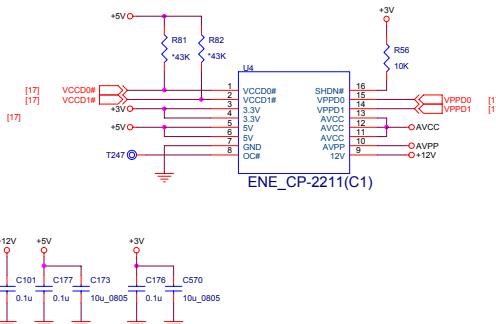
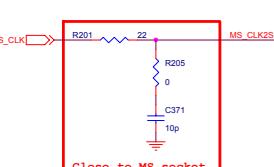
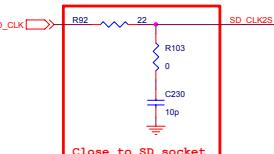
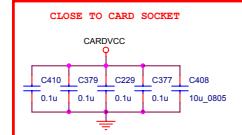
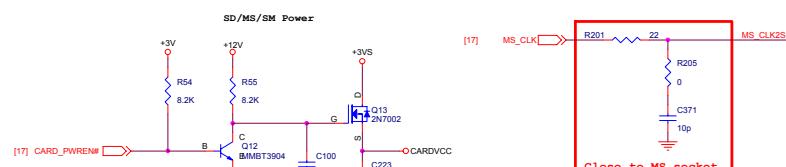
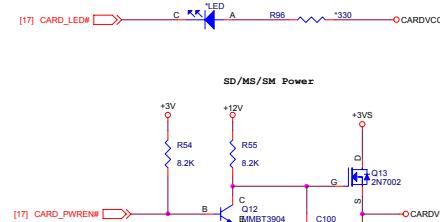
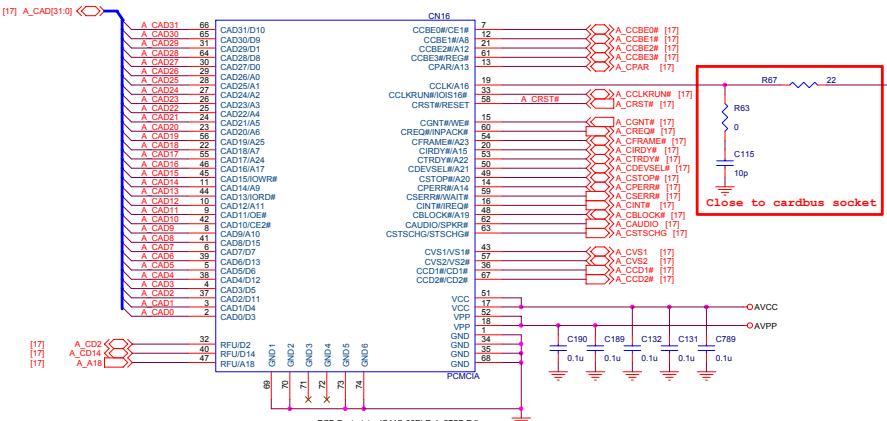
## Schematic Diagrams

Sheet 18 of 29  
PCMCIA ENE CB710

# PCMCIA ENE CB710



# PCM Socket, 4 In 1 Socket



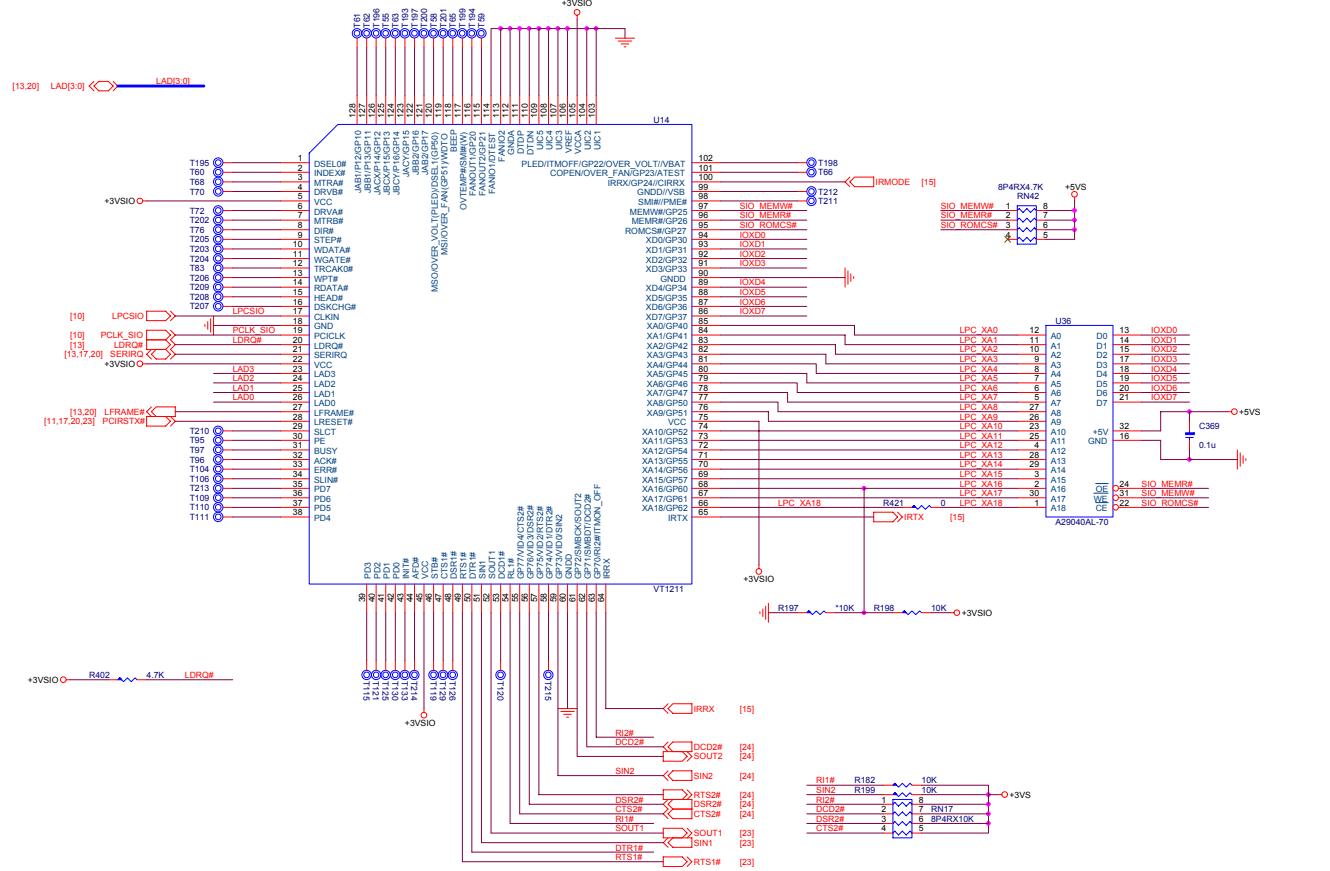
**Sheet 19 of 29**  
**PCM Socket, 4 In 1**  
**Socket**

## C. T2X0V Schematics

### Schematic Diagrams

## SIO, BIOS, FIR

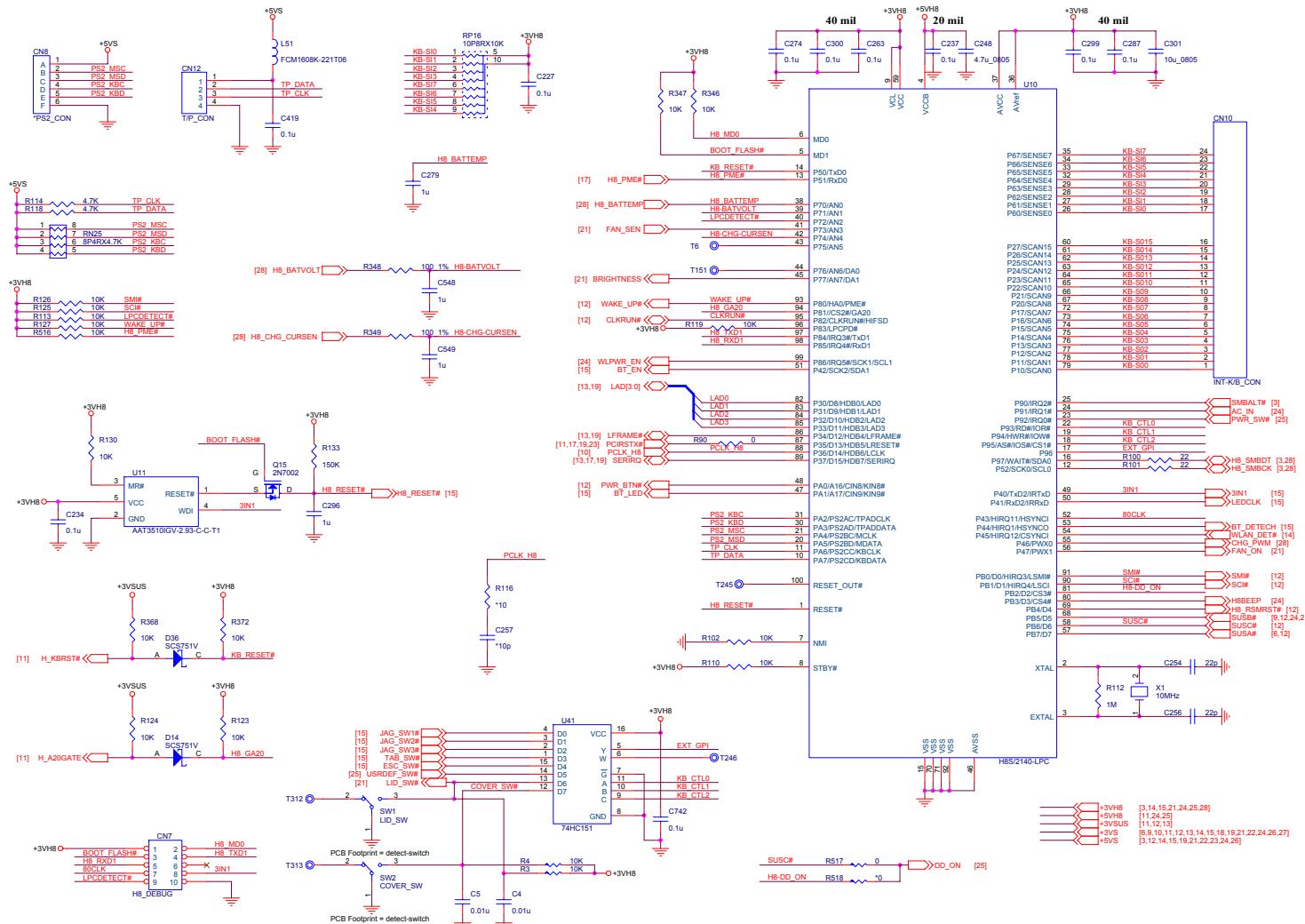
Sheet 20 of 29  
SIO, BIOS, FIR



## Schematic Diagrams

### H8S / 2104LPC

Sheet 21 of 29  
H8S / 2104LPC

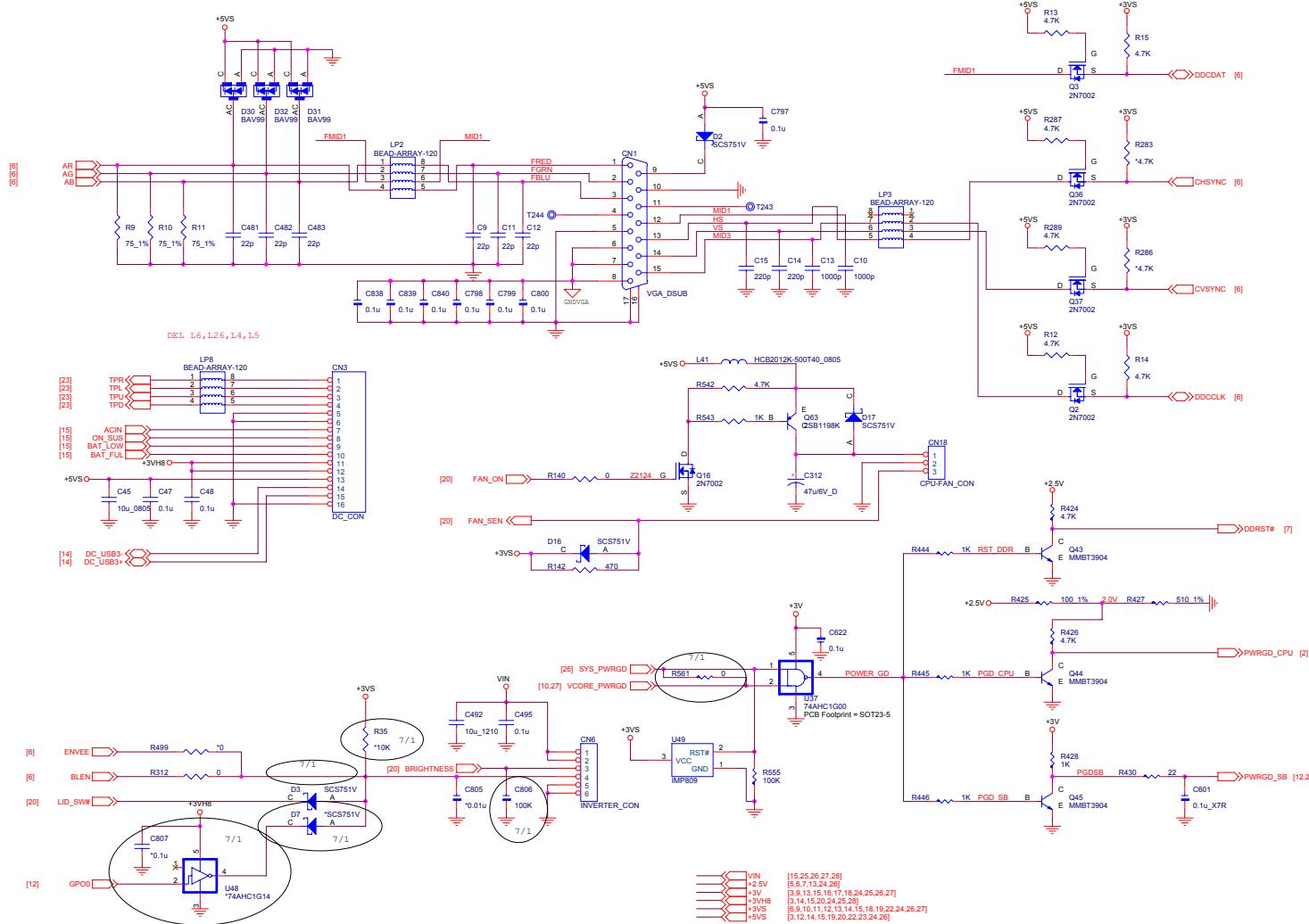


## C. T2X0V Schematics

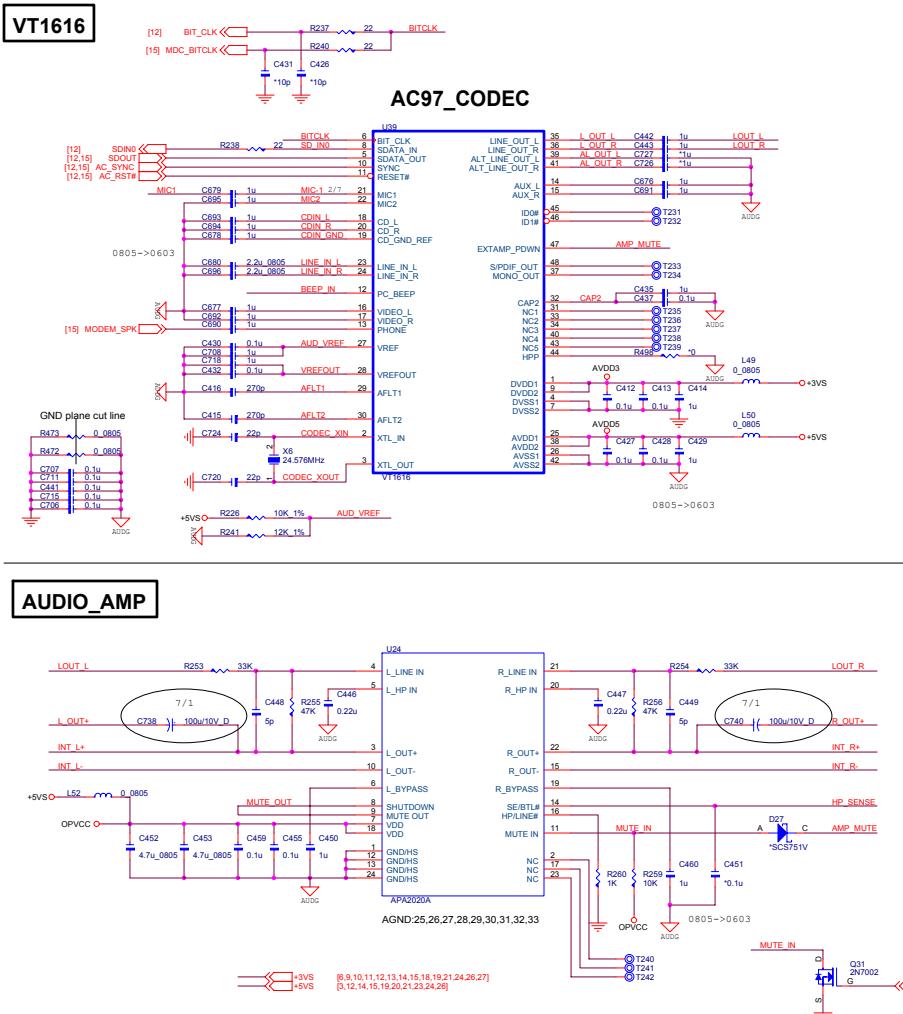
## Schematic Diagrams

### Fan, CRT, Inverter, DC, Power\_GD

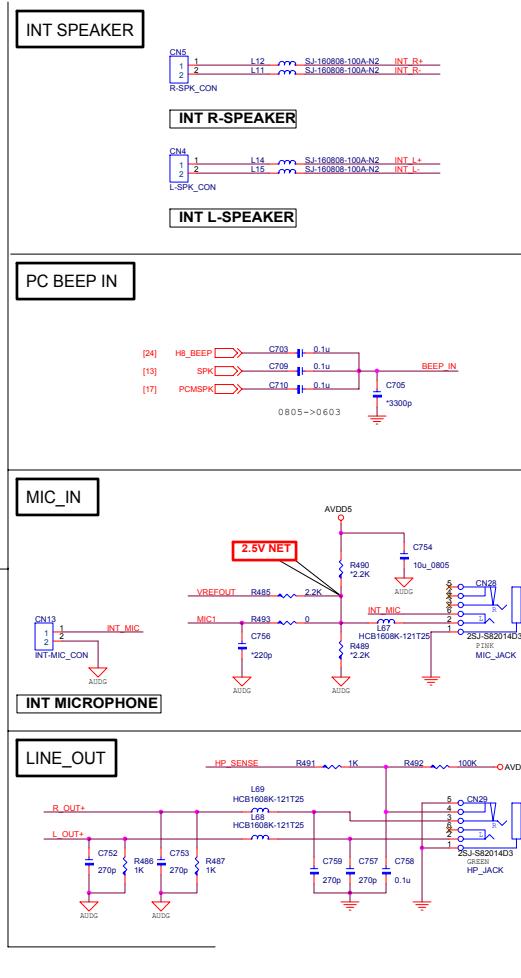
Sheet 22 of 29  
Fan, CRT, Inverter,  
DC, Power\_GD



## Audio Codec VT1616



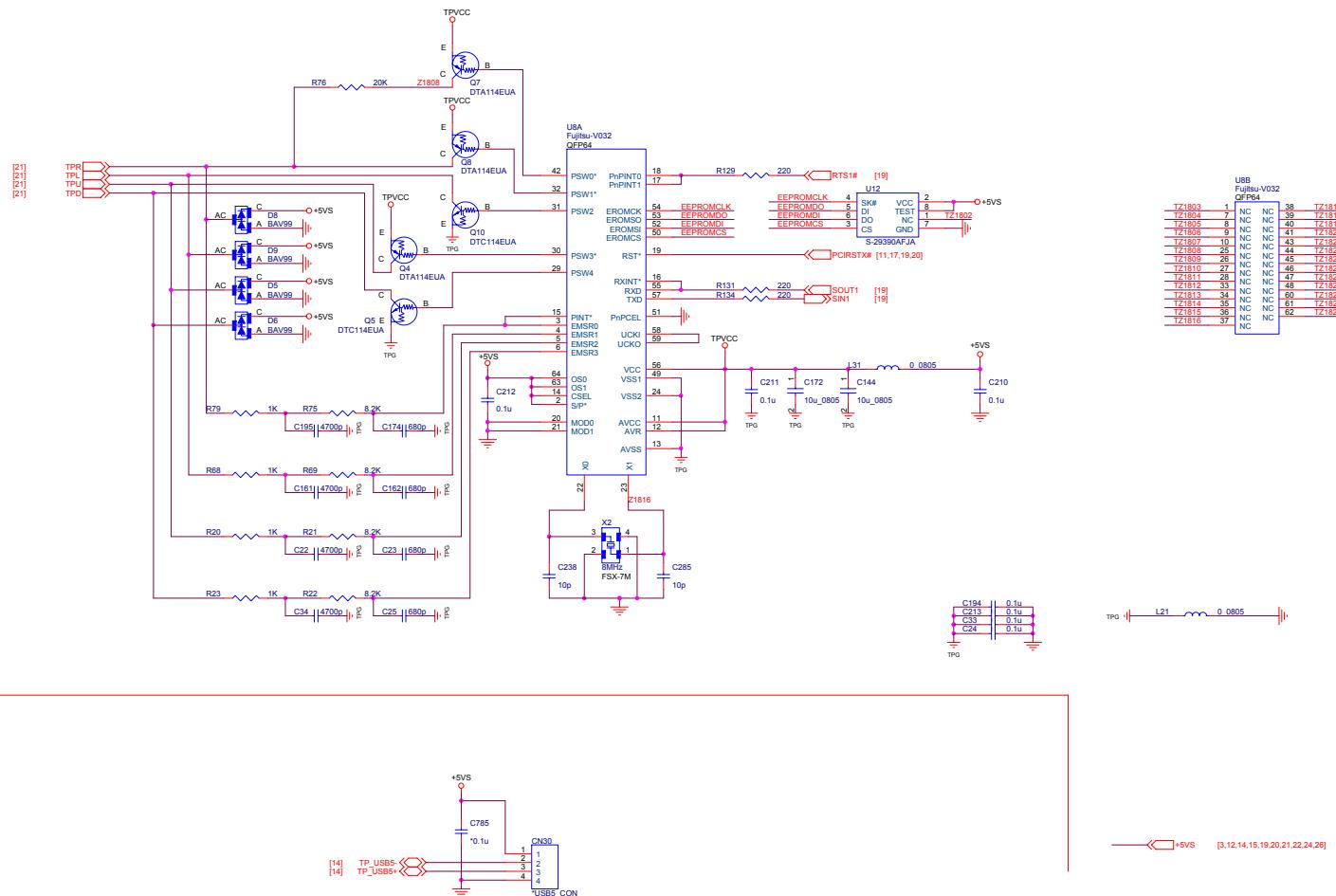
Sheet 23 of 29  
Audio Codec  
VT1616



## Schematic Diagrams

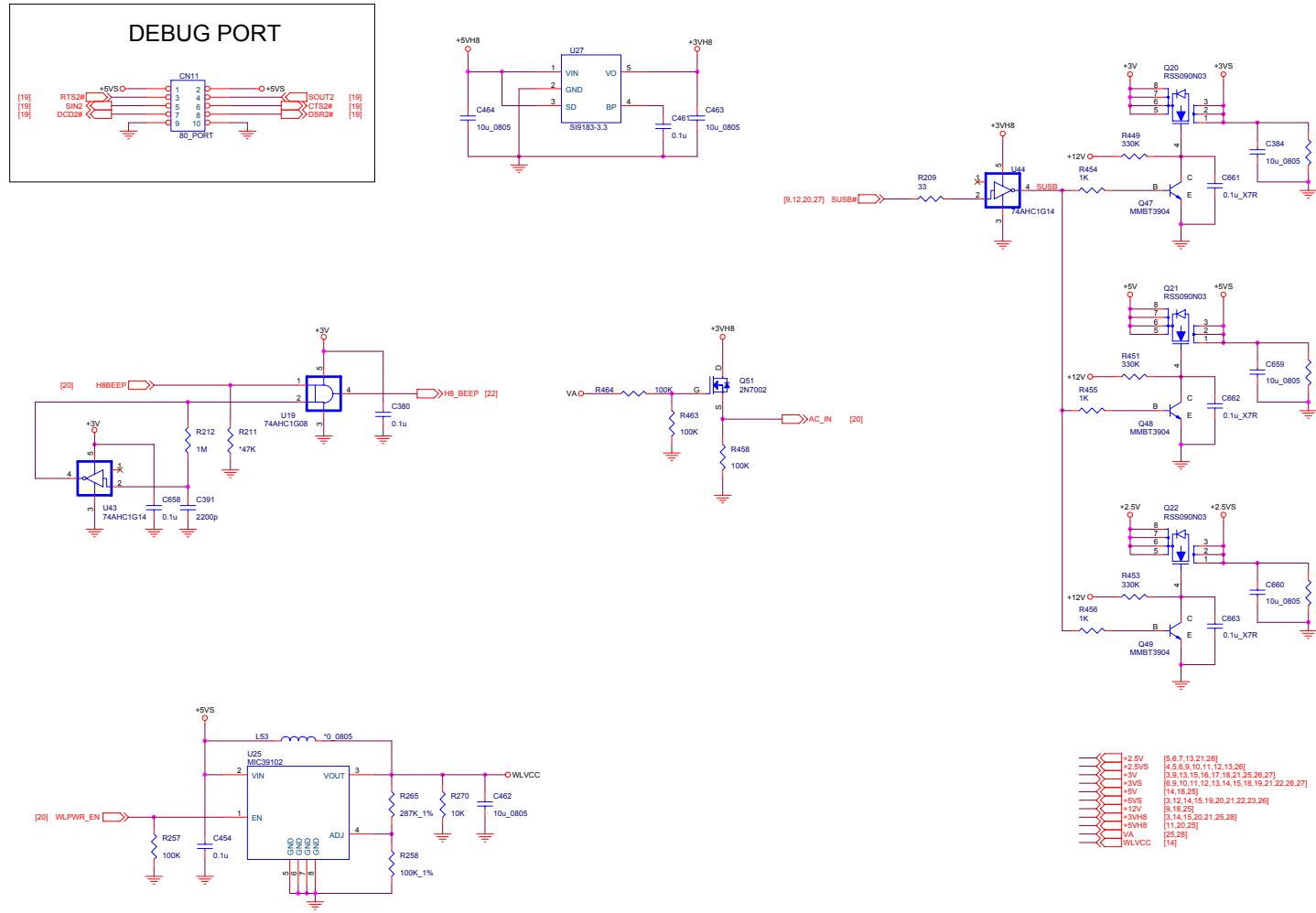
# Touch Panel Controller

Sheet 24 of 29  
Touch Panel  
Controller



## System Power 1

Sheet 25 of 29  
System Power 1



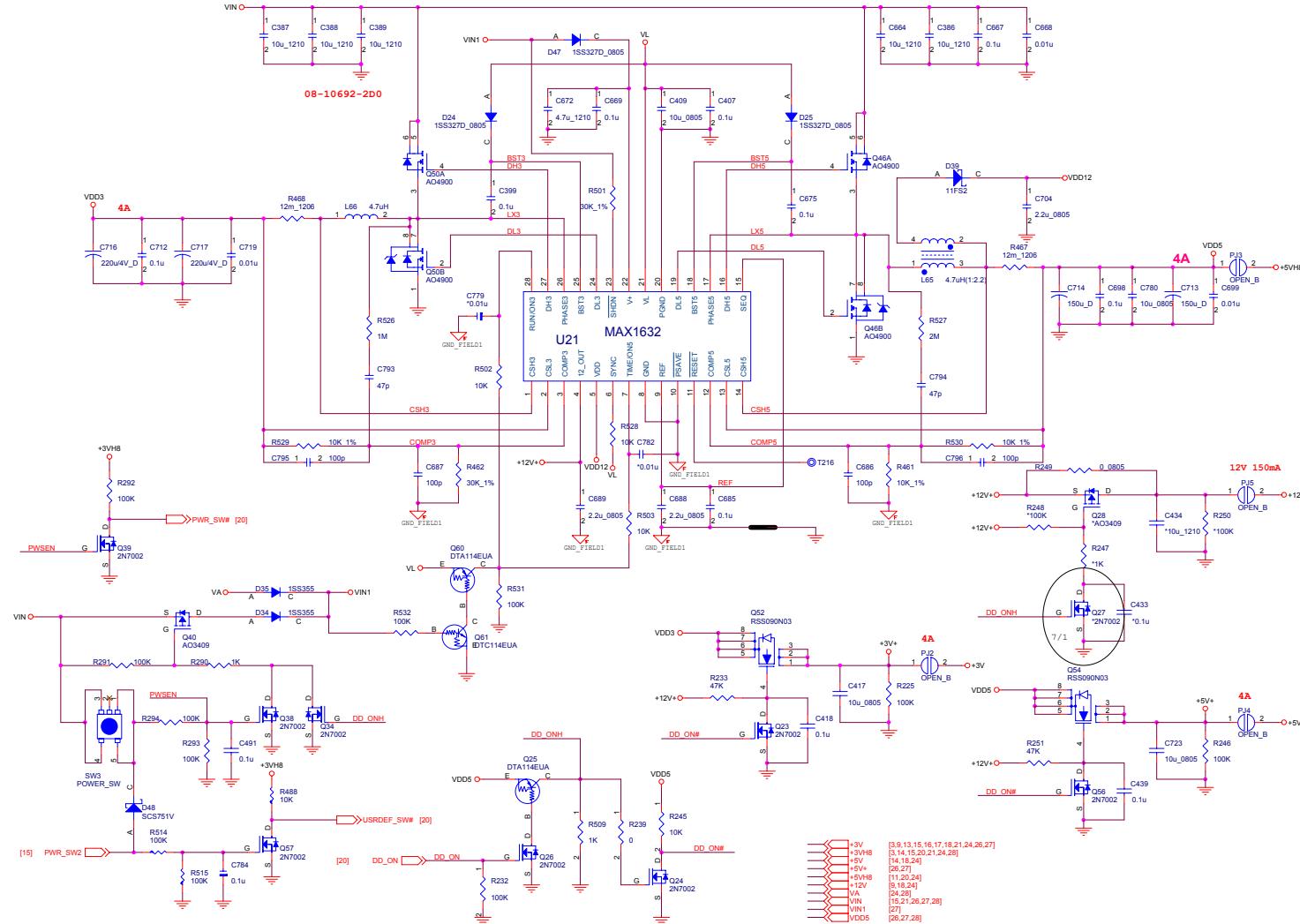
## C. T2X0V Schematics

## **Schematic Diagrams**

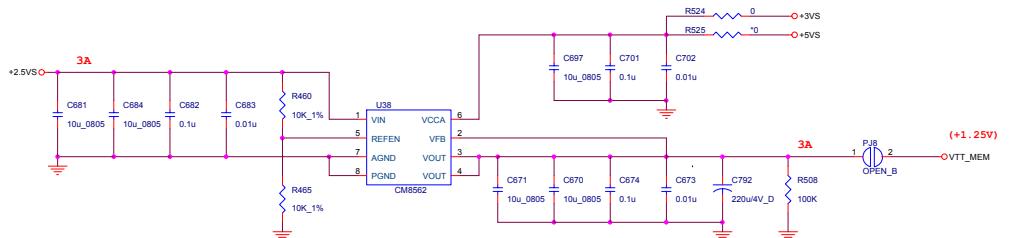
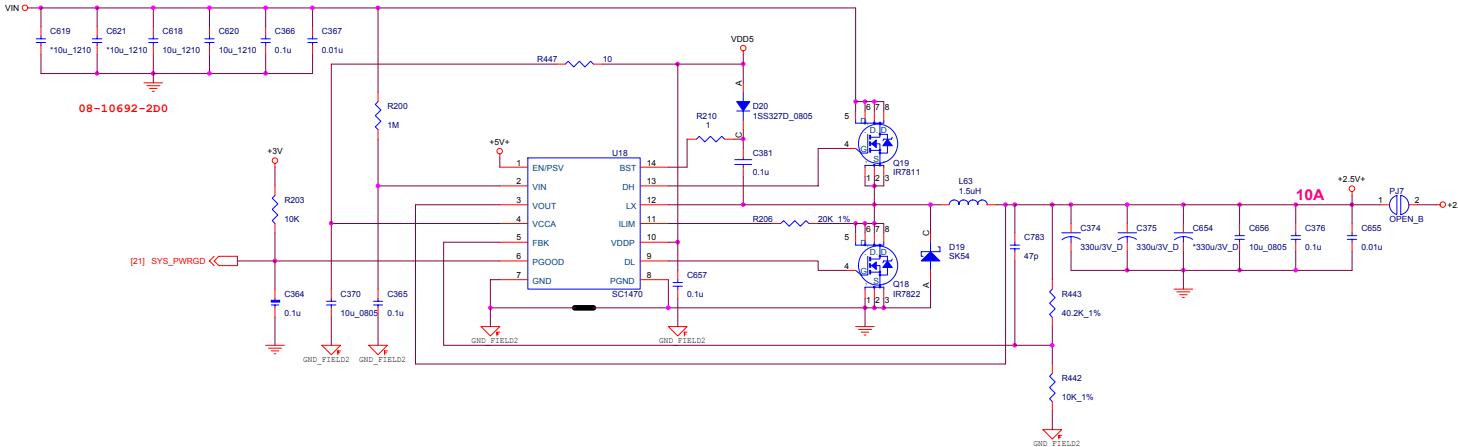
---

## System Power 2

**Sheet 26 of 29**  
**System Power 2**



# System Power 3

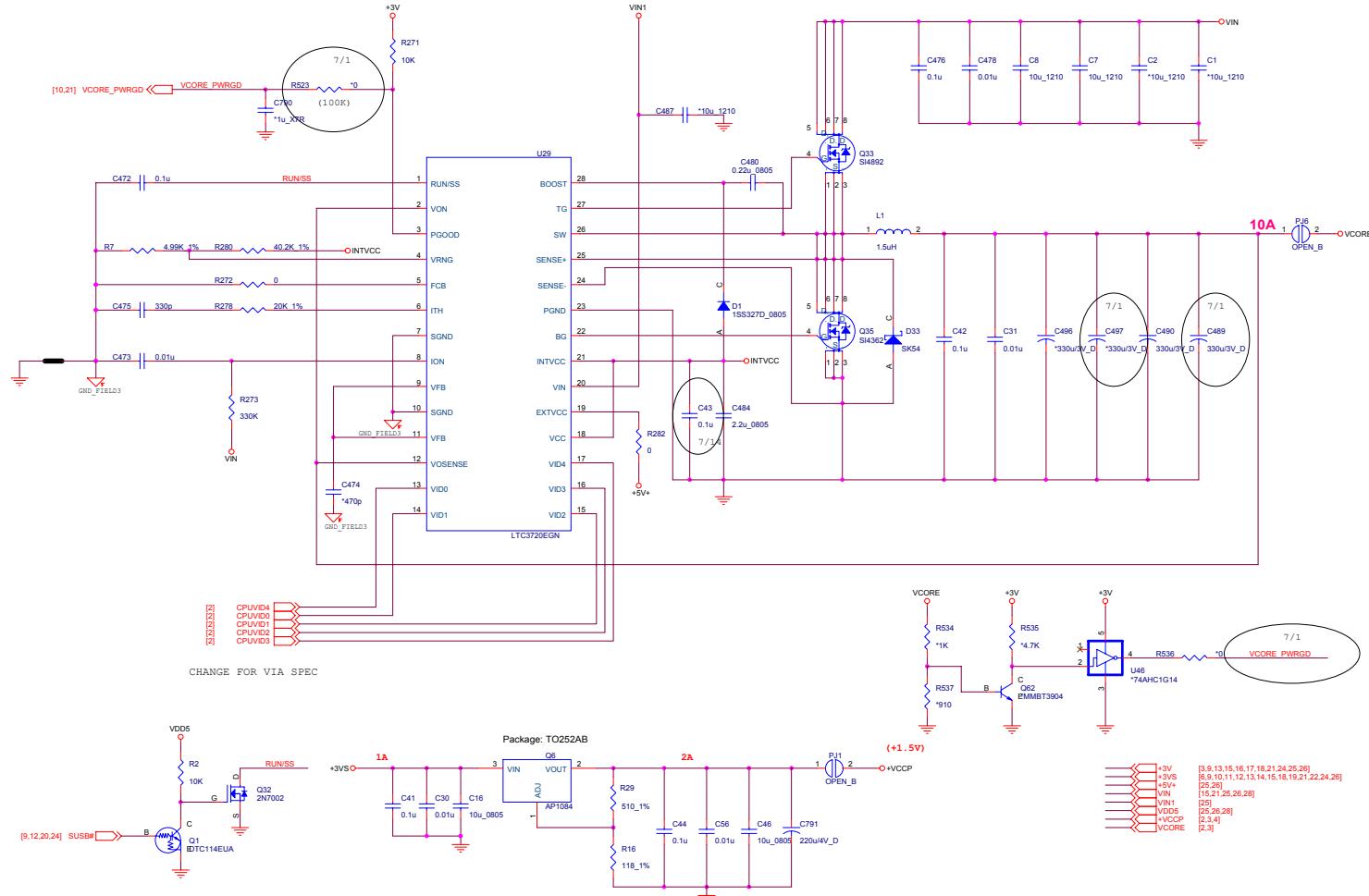


+2.5V	[5,6,7,13,21,24]
+2.5VS	[4,5,6,9,10,11,12,13,24]
+3V	[3,8,13,15,16,17,18,21,24,25,27]
+3VS	[25,27,28]
VDD5	[25,27,28]
VIN	[15,21,25,27,28]
VTT_MEM	[6,9,10,11,12,13,14,15,16,18,19,21,22,24,27]
+3VS	[3,12,14,15,19,20,21,22,23,24]

## Schematic Diagrams

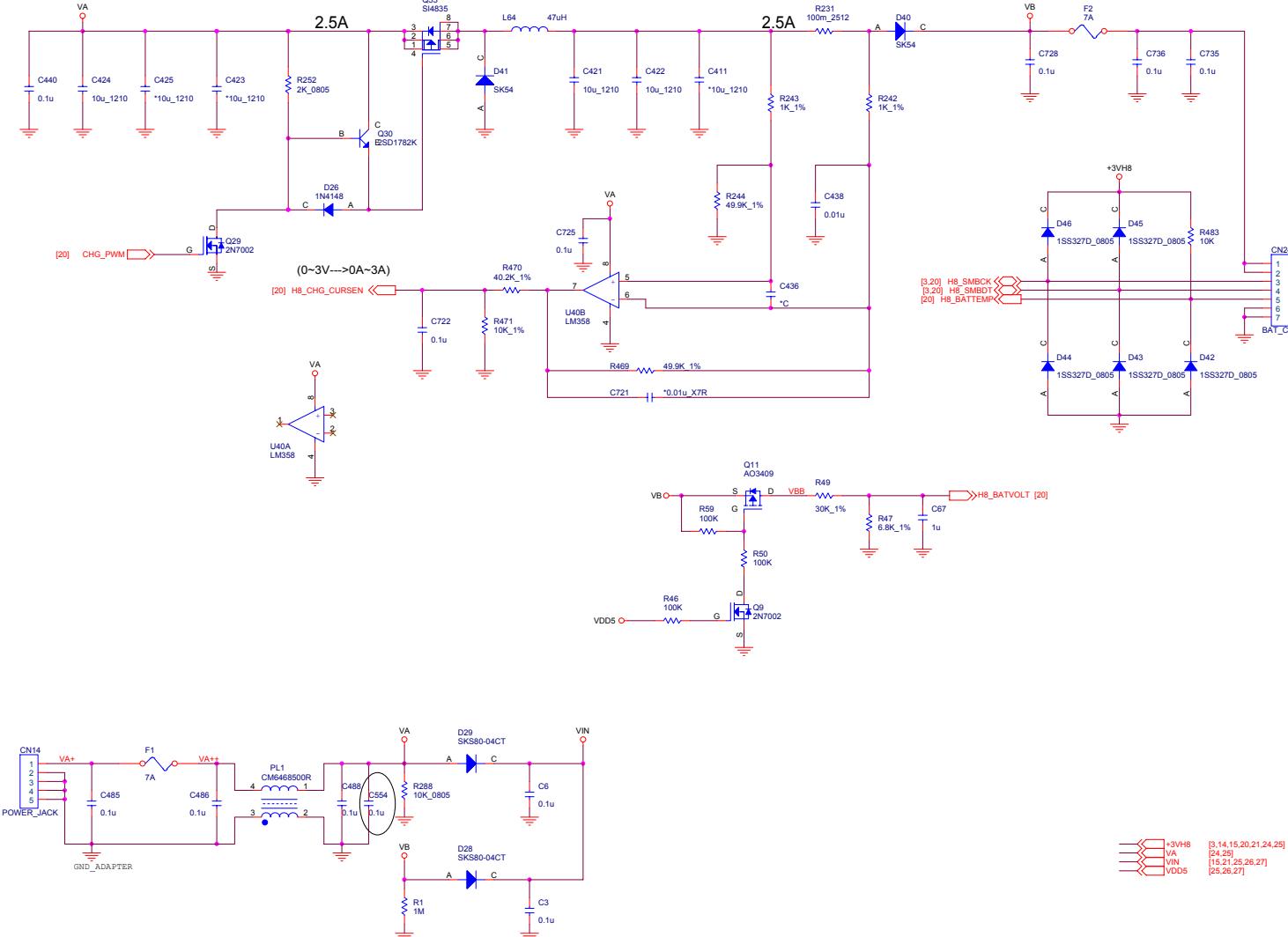
### CPU VCORE

Sheet 28 of 29  
CPU VCORE



## Charger

Sheet 29 of 29  
Charger



## Schematic Diagrams