

## Number/Revision:

PY-CIB080-00

## **Issue Date:**

April 08, 2022

#### Title:

PRIMERGY M6 models, High-speed rotation of fan when specific PCI cards are installed in PRIMERGY 2Way M6

## Applies to:

Primergy

RX2530 M6 RX2540 M6

# **Summary:**

High-speed rotation of fan when specific PCI cards are installed in PRIMERGY 2Way M6

## **Symptoms:**

Powering on the system with a specific PCI card installed causes the system fan to rotate at high speed at all times, which increases the operating noise of the equipment.

Although the system fan is operated at high speed, there is no effect on the system operation or the life of the fan.

How to determine the issue when it occurs.

- 1. Check the hardware configuration whether it matches with the Occurrence Conditions.
- 2. Collect the PrimeCollect to confirm the system fan is rotating in high-speed, also check there is no abnormality with the hardware.
- 3. If (1) and (2) above are matched, parts replacement will not restore the device. Please inform the system administrator to apply iRMC firmware version 3.37P or later.



(Example) RX2540 M6

System Fans (Current Speed)

When occurred (high speed rotation)

FAN 1A 1 (ok) true 13700 rpm

FAN 1B 1 (ok) true 13700 rpm

FAN 2A 1 (ok) true 13700 rpm

FAN 2B 1 (ok) true 13300 rpm

FAN 3A 1 (ok) true 13300 rpm

FAN 3B 1 (ok) true 13300 rpm

#### In normal status

FAN 1A 1 (ok) true 4500 rpm

FAN 1B 1 (ok) true 4500 rpm

FAN 2A 1 (ok) true 4400 rpm

FAN 2B 1 (ok) true 4400 rpm

FAN 3A 1 (ok) true 4400 rpm

FAN 3B 1 (ok) true 4400 rpm

## **Occurrence Conditions PRIMERGY RX2530 M6**

When power is turned on with configuration with at least one PCI card and one or more other PCI devices (including OCP) in the table below, the system FAN will always rotate at high speed.

Unit	PCI card	Model
RX2530M6	PRAID EP680i FH/LP	PY-SR4C6
	(SAS array controller card)	PYBSR4C6L
		PYBSR4C62L
	PRAID CP500e FH/LP	PY-SC3FBE
	(SAS array controller card)	PYBSC3FBEL
	PSAS CP503i FH/LP	PY-SC3FB
	(SAS array controller card)	PYBSC3FBL
		PY-SC3FBV
		PYBSC3FBVL
		PYBSC3FBML

The symptom occurs when PY-LA274U (port expansion option (1000BASE-T× 4)) is added to RX2530 M6+PYBSR4C6L (PRAID EP680i FH/LP) configuration.



# **Occurrence Conditions PRIMERGY RX2540 M6**

Turning the power on in the configuration with the PCI card (indicated as the below table) will cause the system FAN to rotate at high speed at all times.

Unit	PCI card	Model
RX2540M6	PRAID EP680i FH/LP	PY-SR4C6
	(SAS array controller card)	PYBSR4C6L
		PYBSR4C62L
	PRAID CP500e FH/LP	PY-SC3FBE
	(SAS array controller card)	PYBSC3FBE
		PYBSC3FBEL
	PSAS CP503i FH/LP	PY-SC3FB
	(SAS array controller card)	PYBSC3FBL
		PY-SC3FBV
		PYBSC3FBVL
		PYBSC3FB1L
		PYBSC3FBML
	PLAN EP MCX4-LX 25Gb 2p SFP28	PY-LA3F2U
	(Port expansion option)	PYBLA3F2U
		PY-LA3F2UN
		PYBLA3F2UN
	PIB EP 100Gb 2port EDR ConnectX-6	S26361-F5724-L202
	[Dual port IB HCA card (100Gbps)]	S26361-F5724-E202
	PIB EP 200Gb 2port EDR ConnectX-6	PY-HC402
	[Dual port IB HCA card (200 Gbps)]	PYBHC402



## Cause:

PRIMERGY 2Way M6 reads PCI device information during POST and performs FAN control. If the iRMC firmware (SDR) registration is incomplete and a specific PCI device is installed in the configuration, the iRMC will recognize it as an undefined PCI card. It causes the iRMC FAN control to enter Emergency mode, which results in the system FAN rotating at high speed at all times.

## Solution:

Update the server iRMC firmware to the latest version as recommended below.

RX2530 M6: 3.37P + SDR3.32 RX2540 M6: 3.37P + SDR3.66

## **Revision History:**

REVISION	DATE	CHANGE SUMMARY
00	April 08, 2022	Initial draft Release based on TC23006-01