Modification Recommended Service Note

Supersedes:
U7179-81000-01

U7179-81000 - 16-Channel High Current Load Card up to 15A

Serial Numbers: All units
Manufacturing ID Number: N/A

The Problem – Wrong hardware ID detection on U7179A load card by System Configuration Editor (SCE) software when there are 10 or more cards in the E6198B SLU and it happens only on the left most slot of U7179A card.

Parts Required:

P/N	Description	Qty.
U7179-81000	High Current Load Card up to 15A	x1

ADMINISTRATIVE INFORMATION

ACTION CATEGORY:	[X] ON SPECIFIED FAILURE [[]] AGREEABLE TIME	STANDARDS LABOR: 2.0 Hours			
LOCATION CATEGORY:	[X] SERVICE CENTER [[]] ON-SITE (active On-site contract required) [[]] CHANNEL PARTNERS	SERVICE INVENTORY:	[X] RETURN [[]] SCRAP [[]] SEE TEXT	USED PARTS:	[X] RETURN [[]] SCRAP [[]] SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	NO CHARGE AVAILABLE UNTIL: July, 2025			
	[[]] Calibration Required [X] Calibration NOT Required	PRODUCT LINE: QW AUTHOR: MC.Lim			

ADDITIONAL INFORMATION:

Situation:

When all load cards are populated in the E6198B SLU (refer to Figure 2), the hardware ID of the U7179A load card in the left-most slot (slots 1 or 3) is not recognized correctly. The correct ID for U7179A card is 32, while the invalid IDs that have been observed could be 33, 35,36, 37, 38, 39, 40, 41, 44, 46, and 47 (not fixed).
i.e. TestExec gives the following error message when it starts:

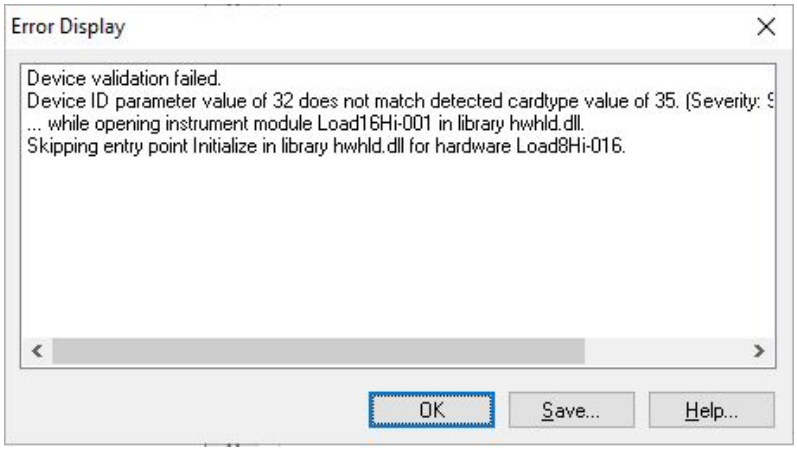


Figure 1. TestExec error

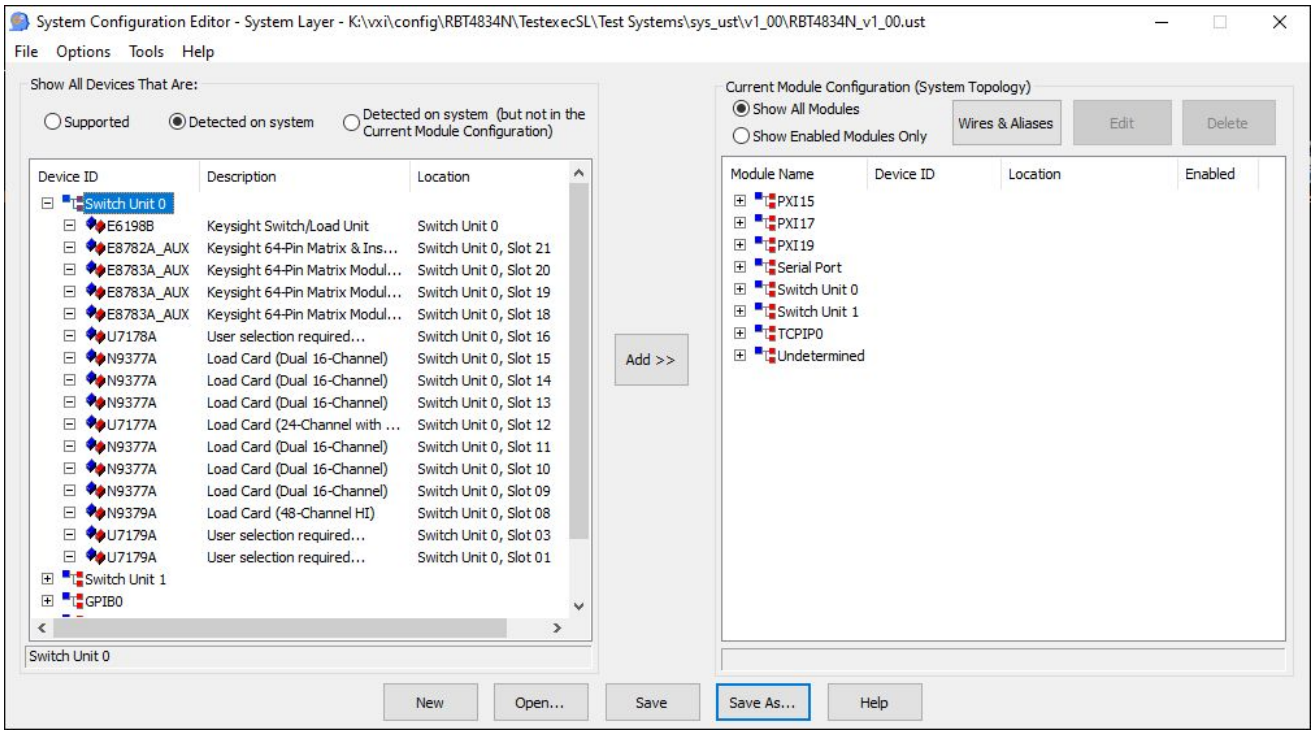


Figure 2. SCE screenshot

Hardware ID detection error only occurs if there are 10 or more cards in the SLU and happens at the left-most slot of the U7179A card. It is determined that a delay in control signals that are fed to the ID

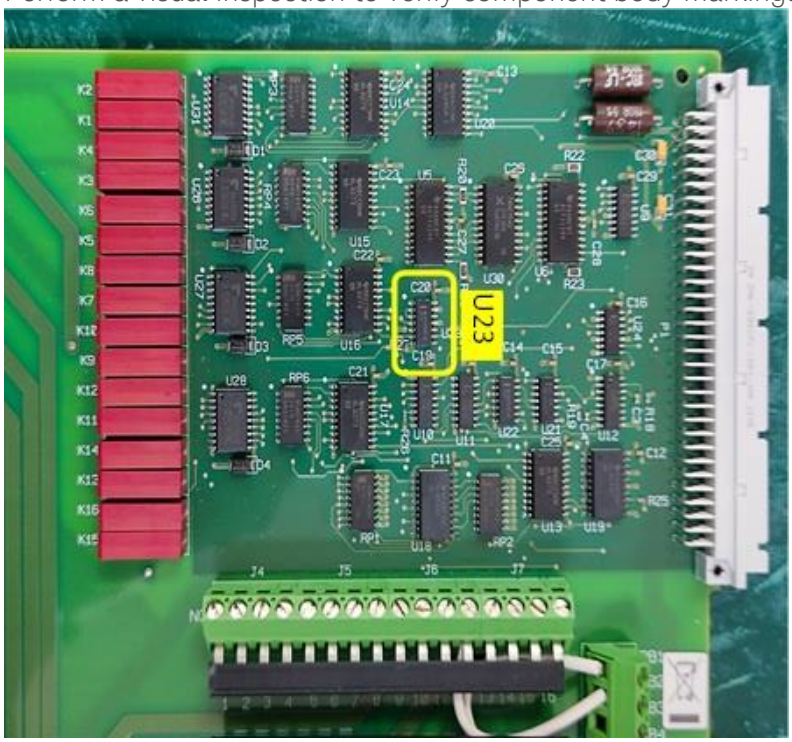
IC from the specified manufacturers will result in a different U7179A ID. This delay causes the time mismatch on the timing diagram thus affecting U7179A ID signals.

Solution/Action:

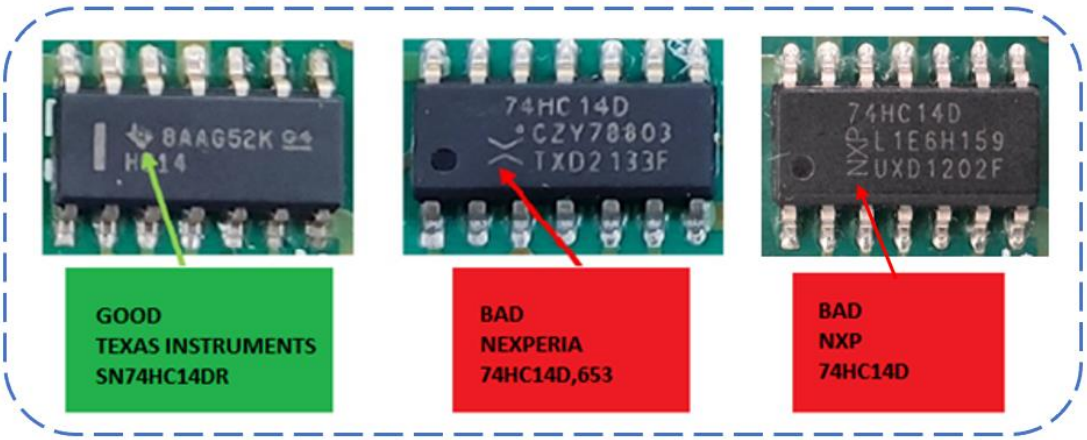
When the U7179A load card encounters a wrong hardware ID detection issue and the U23 IC on the U7179A load card is recognized as being from the NEXPERIA or NXP manufacturer, replace the U7179A load card with a new card (U7179-81000 or U7179-89000). Otherwise, assume there are no timing issues with the U7179A load card and do not proceed with this service instruction.

How to identify if the card is affected:

1. Perform a visual inspection to verify component body markings on the IC U23.



2. If the manufacturer mark indicates NEXPERIA or NXP, the card is identified as affected.
3. If the manufacturer mark indicates TEXAS INSTRUMENTS, no action is required.



Manufacturer Identification

Revision History:

Date	Service Note Revision	Author	Reason for Change
14 Jul 2023	01	MC.Lim	As Published
30 Jan 2024	02	MC.Lim	Units affected by IC manufacturers, not limited to SN range