PRODUCT INFORMATION NOTICE

1. TITLE UT54ACS162245SLV (MULTI-PURPOSE 3-VOLT TRANSCEIVER WITH COLD/WARM SPARE I/O) ADD POWER SEQUENCE OF VDD1/VDD2	**2. DOCUMENT NUMBER** SPO-2014-PIN-0004

	3. DATE *(Year, Month, Date)* 2014, September, 5

4. MANUFACTURER NAME AND ADDRESS CAES 4350 CENTENNIAL BOULEVARD COLORADO SPRINGS, COLORADO 80907-3486	**5. MANUFACTURER POINT OF CONTACT NAME** Fred Sievert
	6. MANUFACTURER POINT OF CONTACT TELEPHONE (719) 594-8000
	7. MANUFACTURER POINT OF CONTACT EMAIL Sievert@cobhamaes.com

8. CAGE CODE 65342	**9. BLANK**	**10. PRODUCT IDENTIFICATION CODE** WA04 & WA05	**11. BASE PART** UT54ACS162245SLV
12. BLANK		**13. SMD NUMBER** 5962-02543	**14. DEVICE TYPE DESIGNATOR** ALL
		15. RHA LEVELS ALL	**16. QML LEVEL** ALL
		17. NON QML LEVEL ALL	**18. BLANK**

19. DESCRIPTION (FOR NEW PRODUCTS, PROVIDE AVAILABILITY DATE AND LEAD TIME)

When powering VDD1 on the UT54ACS162245SLV ahead of VDD2, an increased quiescent current up to 150mA on the VDD1 supply occurs. The increased VDD1 supply current remains until VDD2 reaches 1.5V +/-5%.

Add power application guidelines and power-up sequencing explanation to the datasheet and SMD.

Power Application Guidelines
For proper operation connect power to all VDD pins and ground all VSS pins (i.e., no floating VDD or VSS supply pins). If VDD1 and VDD2 are not powered up together, then VDD2 should be powered up first to ensure proper control of /OEx and DIRx. Control of the outputs /OEx and DIRx pins is not guaranteed until VDD2 reaches 1.5 +/-5%. During normal operation of the device, after power up, insure VDD1$\geq$VDD2.

Power Up Sequence
Because the direction control (DIRx) and output enable (/OEx) pins on the UT54ACS162245SLV are powered by VDD2, user's should power-up VDD2 before VDD1. If VDD1 is powered on first, VDD2 must be powered on within 1 second of VDD1 reaching 1.5V +/-5%. An elevated VDD1 supply current up to150mA will occur when VDD1 $\geq$ 1.5V+/5% and VDD2 $\leq$ 1.5V +/-5%.

Warm Spare
Once the UT54ACS162245SLV is powered up with VDD1 $\geq$ VDD2, the application may place the device into "Warm Spare" mode by driving EITHER supply to VSS +/- 0.25V with a maximum 1KΩ impedance between VDDx and VSS. While in Warm Spare, the device places all outputs into a high impedeance state (see DC electrical parameters, Iws).

Cold Spare
The UT54ACS162245SLV places the device into "Cold Spare" mode when BOTH supplies are set to VSS +/- 0.25V with a maximum 1KΩ impedance between VDDx and VSS. While in Cold Spare, the device places all outputs into a high impedeance state (see DC electrical parameters, Ics).

NOTE: THIS DOCUMENT IS PUBLISHED FOR INFORMATION PURPOSES AND MAY PROVIDE FORWARD LOOKING STATEMENTS THAT ARE SUBJECT TO CHANGE. THE USERS SHOULD CONTACT THEIR LOCAL CAES SALES OFFICE FOR ANY ACTIONABLE CONTENT DESCRIBED HEREIN.

20. ADEPT REPRESENTATIVE **Timothy L. Meade**	**21. SIGNATURE** *Timothy L. Meade*	**22. DATE** **September 12, 2014**

Affected Part Numbers
UT54ACS162245SLV-UPC
UT54ACS162245SLV-UCC
UT54ACS162245SLV-UCA
5962R0254301QXC
5962F0254301QXC
5962R0254301QXA
5962F0254301QXA
5962R0254301VXC
5962F0254301VXC
5962R0254301VXA
5962F0254301VXA
5962H0254301QXC
5962G0254301QXC
5962H0254301QXA
5962G0254301QXA
5962H0254301VXC
5962G0254301VXC
5962H0254301VXA
5962G0254301VXA