

Capacitive Touch Display 10.1" LVDS Errata Document





Document Revision History

Date	Doc. Rev.	Notes
15-July-2021	Rev. 1.00	Initial Release



Overview



Errata #1: HAR-8250 – High peak current caused by the 10.1" LVDS display due to the brightness control implementation

Affected Version:	Capacitive Touch Display 10.1" LVDS V1.0
Fixed in:	not scheduled

Customer Impact

The high current peaks on pins 39 and 40 of the LVDS connector might trigger the current protection threshold of the power supply circuit used to generate the VCC/LED+ voltage on carrier boards. The peak current can cause issues especially at low brightness levels.

Description

The backlight inverter of the 10.1" LVDS display might create high current peaks on the two VCC/LED+ pins of the LVDS connector (pins 29 and 30 of CON4-INPUT).

The PWM backlight control signal directly enables and disables the backlight inverter. Enabling the inverter can cause an inrush current. Since the inverter is disabled and re-enabled continuously, this can cause repeated current peaks. Especially at low backlight levels, these peaks can be significant.

Workaround

Customers should check the power supply circuit used to generate the LVDS VCC/LED+ voltage on the carrier board, to ensure it can provide at least 650mA at 12V.



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