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Sent: 23 March 2004 08:30
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Subject: Instrument warm units Clock interface
Importance: Low



GDIR 4 1
cerpt_SBDL Drivers_

This mail ref: H-P-ASP-LT-4648

Sir,

This mail concerns the synchronisation interface between the Spacecraft CDMU and the:

- SPIRE-DPU
- PACS - DECMEC
- HIFI - (no synchronisation interface)
- HFI-DPU
- LFI-REBA
- SCS-SCE

We have received an RFD from the CDMU contractor about the fault voltage tolerance specified in GDIR § 6.8.1.4 "SBDL". Such an SBDL interface is used with some instruments to receive the 131 kHz synchronisation signal.

To assess this RFD properly, we would need to know more precisely how the electrical interface of these concerned instruments is built. More precisely, we need to know the type of the driver used (with its polarisation) to receive that 131kHz signal. Therefore, could you please provide us, as soon as possible, with detailed information related to that SBDL interface ?

The GDIR §6.8.1.4 (RD1 of IID-A, see extract below) requires, for warm units, the use of a HS-26C32RH driver (or similar). Can you confirm that such a component is used in your instrument.

(See attached file: GDIR 4 1 Excerpt_SBDL Drivers_GDEL 711.pdf)

In the future, this information must be added in the relevant chapter 5.11 of the IIDBs (subsection related to interface circuits). Therefore the best would be to send this information through a change request to IID-B (hopefully without impact).

Thank you for your cooperation, and with best regards,
Bernard

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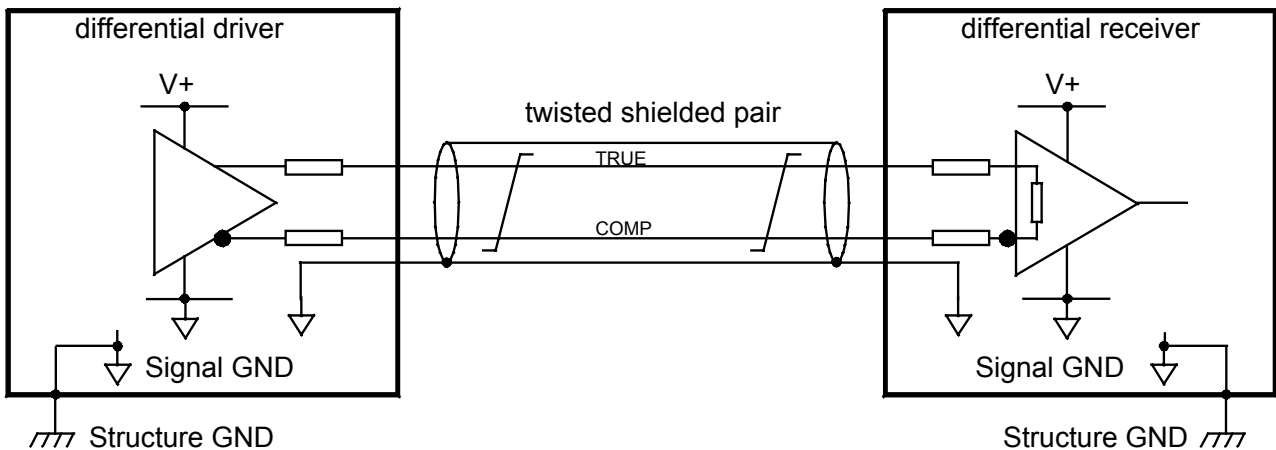


Figure 6-20 : Schematic Electrical interface for the SBDL

Reference **GDEL-711**

To ensure the maximum of compatibility and the minimum of risk, the SBDL interface shall be implemented using the components as shown in Figure 6-22. Additional protection components (to provide protection during on-ground operations) may be added as deemed necessary by the circuit designer.

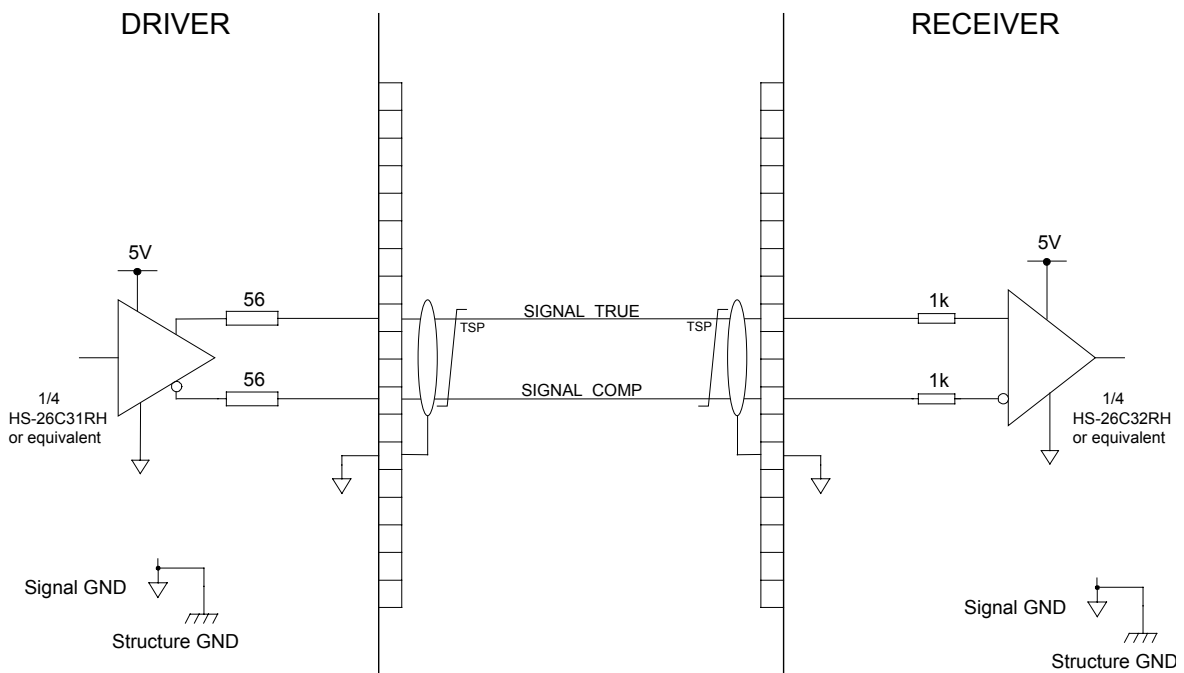


Figure 6-22 : SBDL Interface Details

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