



Product Information

CU6-RATTLE

CompactPCI® Serial • Dual-Port Isolated RS-232 Interface

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General

The CU6-RATTLE is a dual-port isolated RS-232 Interface for PICMG® CompactPCI® Serial systems. It is an assembly unit, comprised of the CK2-SESSION XMC module carrier card, and the DU1-PONY RS-232 XMC mezzanine module.

Both D-Sub front panel connectors are isolated against the board circuitry and withstand up to 250VAC. The 460kbps EIA/TIA-232 transceivers provide ± 15 kV ESD protection and are suitable for many industrial applications e.g. data communication or diagnostic ports.



CU6-RATTLE (Similar Picture)



CU6-RATTLE (Similar Picture)

Theory of Operation

The CU6-RATTLE is a CompactPCI® peripheral card, equipped with a 32-bit 33/66MHz PCI to PCI Express® bridge. The internal PCI Express® lane is wired to the on-board XMC module connector J15.

The on-board XMC module is equipped with a PCI Express® to UART bridge. Two isolated transceivers are provided to meet the RS-232E physical layer specifications, and allow for 460kbps data transfer speed.

Summary of Features

- ▶ PICMG® CompactPCI® Serial standard (CPCI-S.0), peripheral slot card
- ▶ Assembly unit comprising carrier board CK2-SESSION & XMC module DU2-PONY
- ▶ Single size Eurocard 3U 4HP 100x160mm²
- ▶ XMC module carrier board, equipped with XMC connector J15
- ▶ Backplane connector J1 (32-bit, 33/66MHz) 3.3V/5V V_{IO}
- ▶ XMC module carrier board, equipped with XMC connector J15

- ▶ XMC Module single-width mezzanine card 139mm x 74mm, stack height 10mm
- ▶ Equipped with dual-port UART
- ▶ PLX Oxford 950 UART w. 128-byte transmit/receive FIFO
- ▶ Windows® & Linux device driver support

- ▶ 2.5kV isolation barrier RS-232 transceivers (Analog Devices *isoPower*)
- ▶ Transceivers meet EIA/TIA-232-E specifications
- ▶ High data rate up to 460kbps
- ▶ ±8 kV/±15 kV ESD protection on transceiver input/output pins
- ▶ High common-mode transient immunity >25 kV/μs
- ▶ Suitable for high noise environment data communication and diagnostic ports
- ▶ Two front bezel male 9-pin D-Sub connectors (RXD/TXD, CTS/RTS)
- ▶ RS-232 ports isolated against each other and board circuitry 250VAC

- ▶ Commercial and industrial temperature range
- ▶ Long term availability
- ▶ Rugged solution (coating/sealing available on request)
- ▶ RoHS compliant



CU6-RATTLE Assembly Unit (similar picture)

Detailed Information

The CU6-RATTLE is an assembly unit, which is comprised of a XMC module carrier card, and the XMC module itself. For more detailed information on these components please refer to the table below:

CU6-RATTLE Elements		
CK2-SESSION	XMC Carrier	www.ekf.com/c/ck2/ck2.html
DU2-PONY	XMC Module	www.ekf.com/d/dcom/du2/du2.html

Ordering Information

Ordering Information
For popular CU6-RATTLE SKUs please refer to www.ekf.com/liste/liste_21.html#CU6

Industrial Computers Made in Germany
boards. systems. solutions.

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