RM48 Hercules Safety MCU controlCARD Status: ACTIVE

TMDXRM48CNCD

Description

RM48 controlCARDs from Texas Instruments are ideal products for initial software development and short run builds for system prototypes, test stands, and many other projects that require easy access to high-performance controllers. The controlCARDs are complete board-level modules that utilize an industry-standard DIMM form factor to provide a low-profile single-board controller solution. controlCARDs use the same 100-pin connector footprint to provide the analog and digital I/Os on-board controller and are reasonably interchangeable. The host system needs to provide only a single 5V power rail to the controlCARD for it to be fully functional. The control card can be used as part of a motor control kit and offers additional control, connectivity and safety evaluation features.

Features

- A Texas Instruments RM48L952 337-ball BGA microcontroller
- On board USB XDS100v2 JTAG emulator
- TI 14 pin JTAG debug header for alternate, external JTAG emulator
- JTAG Isolation for either xds100 or alternate emulator
- 10/100 Mbps Ethernet interface via RJ-45 with same PHY as on the TMDXRM48HDK
- Hardware option for routing one or both N2HET timers to the DIMM interface
- Isolated UART/SCI accessible through a USB Virtual Port (VCP)
- LPO_TEST push button switch (causes CLKDET hardware fault on MCU)
- LED indicators for xds100 power, activity, target/MCU power, HET pin activity, Ethernet link and activity, Ethernet speed, and nERROR.
- Reset pushbuttons (nPOR and nRST)
- 5V/3V ADC input configuration
- On board power supply supporting a 5V (as on the DRV8301 EVM) to 6V DC input and producing the 3.3V and 1.2V for the MCU