

PRODUCT BRIEF

TIGER565

Key Features

- MPC565 @ 56MHz¹
- 7.5 to 60V Power input fully protected against transients, reverse-battery and load dump conditions.
- Fault tolerant digital IO and analog inputs with transient suppression.
- Supervisory circuits with watchdog timer and power supply monitoring functions.
- Multiple communication protocol support² (CAN, RS232) along with BDM interface.
- Real Time clock.
- Rugged front panel connectors for power, signal and communication lines.
- Front panel diagnostics LEDs (user programmable).
- Internal expansion headers for standard or custom add-on signal conditioning and power driver boards with front panel connectors.
- Support for standard speed internal data logging.³
- On-board SRAM and NV FRAM for non-volatile storage of runtime parameters.
- Rugged aluminum chassis machined out of a single block of 6061 alloy providing shock and vibration resistance as well as EMI shielding.
- Industrial temperature range of -40°C to +85°C.

Optional components

- Add-on power driver board with H-bridges with current sense, low side drivers and general-purpose relays along with diagnostics feedback.
- Custom add-on boards based on customer requirements for a combination of power and signal conditioning.
- External high-speed data logger unit.⁴
- Multi-Protocol communication card.
- Breakout boards and cables.

Technical Details

Interfaces

- Dual CAN 2.0b channels
- Two RS232 channels
- One BDM interface
- Internal expansion headers with all usable processor lines

Memory

- 1Mb internal flash
- 32Kb internal SRAM
- 1Mb external SRAM
- 8Kb external NV FRAM (I²C)

Analog

- 40 channels of 10-bit analog inputs (0 - 5V)
- Adjustable high and low reference voltages
- All channels are available on both the front panel and the internal expansion slot and are protected by transient suppression arrays.

Digital I/O

- 48 TPU lines (three sixteen channel blocks)
- Twelve PWM channels with 16-bit resolution
- Six 16-bit MIO14 timer systems
- Ten double action IO(DASM) MIOS sub-modules
- Sixteen general purpose MPIO MIOS sub-modules
- All digital I/O are available on both the front panel and the internal expansion slot and are protected by transient suppression arrays

Physical Interface

- Multiple front panel connectors for signals, power and communications; internal metal shell systems for shielding.
- Internal expansion headers for add-on power, signal conditioning and custom interfaces.

Operating Conditions

- Temperature range of -40°C to +85°C.
- RH 10-85% non-condensing.
- 7.5 to 60VDC power input.

Optional Power Driver Board

- Four 3A H-Bridges with current sense.
- Sixteen 10A low side drivers.
- Separate power connector.
- All connectors terminate to front panel.
- Designed to mount into the base unit and maintain enclosure integrity.

Other Options

- NV Memory expansion in 256Kb increments for fast internal data storage requirements.
- Multi-protocol communication card for LIN and other customer specific communication needs.

¹ Scaled up from 4MHz using the PLL

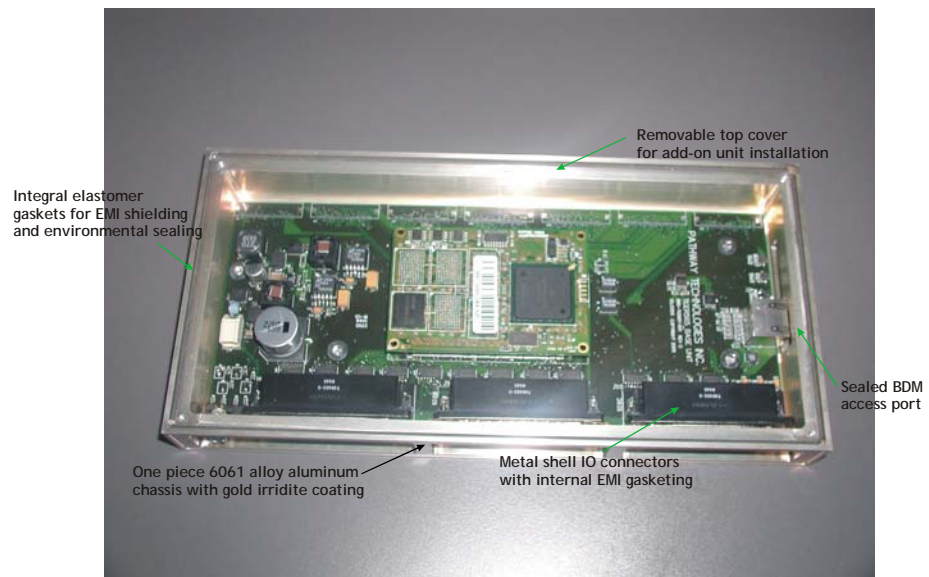
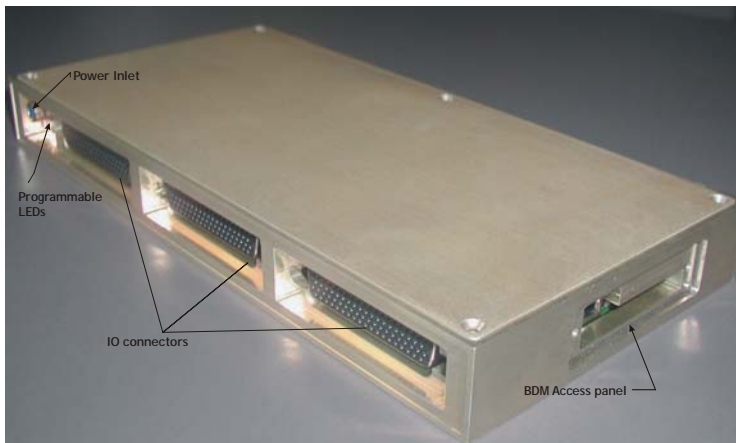
² Support for other protocols via add-on card.

³ Using optional add-on memory card.

⁴ Flash disk based

Physical Characteristics

- Alloy 6061 single piece aluminum chassis with gold irridite coating
- Shock and vibration resistant
- Full EMI/RFI shielding with metal shell connector systems and integral elastomer gasketing which provides both shielding and sealing
- Size is approximately 260mm X 170mm X 30mm (10.2in X 6.7in X 1.2in)
- Top is removable for interior access and add-on card installation
- Sealed side BDM access port for test-bench use which can be closed off for field runs



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