TEXAS
EDGE
COMPUTING

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Mojave Controller

Product Overview

The Mojave Controller is taking computing to the edge and beyond! With a 9V to 48V input voltage range and an on board 5V regulator with a maximum output of 500mA, integrating the Mojave into your system couldn't be easier.

- Designed for the harshest of environments and extreme temperatures of up to 175°C.
- Compatible with the Arduino IDE and the extensive Arduino libraries.
- Perfect for getting your high temperature, rugged projects up and running quickly.

Industrial Grade

Constructed with high temperature materials and rated for a maximum operating temperature of 175°C and at 1.1" x 3.5" it's perfect for a pressure vessel mounting for geothermal or oil and gas, or mounting anywhere computing power might be needed.

Protection

Each digital Input/Output pin is protected by a series resistor and voltage clamping diode to prevent damage in the event of an overvoltage or transient incident.

The power supply input is diode protected against reverse voltage hook up, and also protected by a 1A fuse.

Software

Fully compatible with the Arduino IDE as a Diecimila Atmega168 board. Use the supplied UART cable to download sketches and communicate with the Mojave.

In Circuit Emulator

For power users, the Mojave comes with the standard Arduino 6-pin ICE (In Circuit Emulator) connector. This can be used with Atmel Studio and an Atmel ICE to write your own low level code and get full control of all the processor's resources.

Specifications

Operating Voltage

- Voltage input: 9V to 48V

Environmental

- Operating temperature range: -40°C to 175°C. 400 hours at 175°C, 1000 hours at 150°C

Input/Output

- 14 Digital Input/Output pins (software selectable)
- 6 Analog input pins
- 5V TTL UART
- 5V regulated output, 500mA max.

Microcontroller

- ATmega168 AEC-Q100 Grade 0 qualified 32 pin TQFP
- 16KB Flash memory
- 1KB RAM
- 512 Bytes EEPROM
- 16MIPS throughput
- Two 8-bit Timer/Counters with separate prescaler and compare mode
- One 16-bit Timer/Counter with separate prescaler, compare mode, and capture mode
- Real time counter with separate oscillator
- Six PWM channels
- 10-bit ADC
- SPI serial interface
- 2-wire serial interface
- Programmable watchdog timer with separate on-chip oscillator
- On-chip analog comparator

Physical Dimensions

- 1.1" x 3.5".
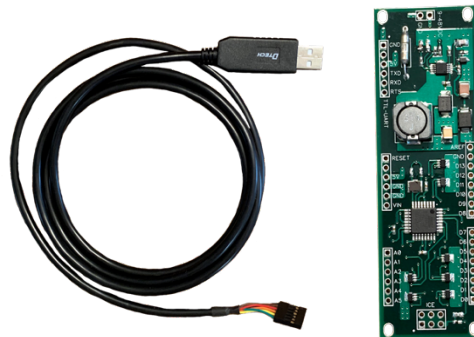
Other

Available as a kit with programming cable or individual boards.