CMM-54415-OEM

The CMM-54415-OEM is a module featuring the MCF54415 micro-controller. This small form factor (2.20"X3.5") board is ideal for industrial OEM embedded application where low cost and small size are important.

Target Applications:

- Industrial control
- Human-machine interface (HMI)
- Fire and alarm systems/applications
- Industrial networking
- High-end lighting control
- Security panels
- · HVAC systems/applications
- · Health care devices
- CMM-5235 upgrade / replacement

2.2" (56mm)

FEATURES with Module support:

- ♦ MCF54415 MCU, 256 MAPBGA Package
 - 32 bit w/ EMAC and MMU support
 - 250Mhz operation
 - 64K Byte single cycle SRAM
 - DDR, DDR2, Mobile DDR Controller
 - 10/100 Ethernet with IEEE 1588 support
 - 32 bit Data and Address Bus
 - 4x SPI Serial ports
 - 2x I2C Serial Ports
 - 10x UART Serial Ports
 - 5x Interrupt Inputs
 - 4x PIT timers
 - 4x 32 bit Timers w/ DMA
 - 12 bit dual ADC, 8 channels
 - 8 channel PWM Timers
 - RTC clock with back-up option
 - BDM / JTAG Port
 - Internal Oscillator w/ PLL clocking
 - 3.3V / 1.2V operation
- 128MByte DDR2 memory
- ♦ 64M Byte 32 bit Parallel flash memory
- ♦ 10/100TX Ethernet Port with RJ45 connector
- ♦ RESET and ABORT (IRQ7) push switches
- Two user application LED indicators
- ♦ 25MHz Primary and 32Khz RTC Oscillators
- ◆ COM Port (UART0), IDE pin header w/ DSUB-9
- ♦ Build option: CAN or 485 Port, 3 pin .1 inch friction lock
- ♦ MCU I/O Port, 2 x 25 pins, .1 inch grid **
- MCU Bus Port (64K x 8 bit), 2 x 17 pins, .1 inch grid**
- ♦ BDM / JTAG Port, 26-pin Freescale standard
- Regulated +3.3V / 1.8V / 1.2V power supplies w/ indicator
- MQX RTOS Board Support Package
- Cables and Wall-Plug power optional

Specifications:

Power Input: 2.1mm DC plug, +6 to +30VDC, 12VDC @ 120ma typical. Board Size: 2.2 W x 3.5 L x 0.6 H Inches, .1" Mounting holes 2" x 3.3". CAN Bus or RS485 interface is a build option.

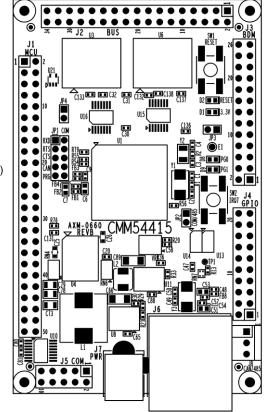
** = not populated, build option

Axiom Manufacturing

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Option Settings:

JP1: 5 position COM Port / UART Option and Boot mode setting Jumpers

- 1) COM (J5) RS232 RXD input to UART0 enable, installed by default.
- 2) COM (J5) RS232 RTS output from UART0 enable, installed by default.
- 3) COM (J5) RS232 CTS input to UART0 enable, installed by default.
- 4) CAN or RS485 RXD (J8) input to UART9 enable, installed by default (build option) Note that input type depends on transceiver type provided and application firmware.
- 5) Boot Loader enable. Application programmer via serial port.
- **JP2**: Development port (BDM port) JTAG or BDM mode enable. Installed = BDM Mode, installed by default.
- JP3 : GPIO Enable for GPIO Port ADC_IN[0: 3] signals, Installed by Default.
 When open the ADC channels may be applied as inputs for reception of analog signals in the 0 to 3V range.

When installed the GPIO ports of PH[7:5, 3] are connected respectfully to the same port pins for digital GPIO or peripheral function provided on these port pins.

JP4 : GPIO Enable for GPIO Port ADC_IN[4: 7] signals, Installed by Default.
When open the ADC channels may be applied as inputs for reception of analog signals in the 0 to 3V range.

When installed the GPIO ports of PH4, PG2, PG4, and PD3 are connected respectfully to the same port pins for digital GPIO or peripheral function provided on these port pins.

Build Options:

Base part number: AXM-0660-xx

- **01** CAN transceiver port with friction lock header
- **02** RS485 Transceiver port with friction lock header
- **0x** MCU Port, BUS Port, and / or GPIO Port connection or stacking headers installed on top or bottom of board. Contact Axiom to configure.

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