



Part Number: MA320206

Description: *ATSAMC21 Motor Control Plug In Module*

Summary:

This plug-in module comes with a ATSAMC21 32-Bit ARM Cortex M0+ MCU device. It can be used with the Microchip MCHV-3 [DM330023-3] and MCLV-2 [DM330021-2].

[Low Voltage BLDC Kit - DM330021-2](#)

[High Voltage BLDC Kit - DM330023-3](#)

Field Oriented Control code is available at the attached download package for PMSM type motors to enable customers to get started immediately.

PLEASE NOTE: For use with the MCHV-3 (High Voltage) external programming adapter AC320202 is required to safely connect to a PC.

[AC320202 Isolated Debugger Interface](#)

Package Contents

SAM C21 Motor Control Plug In Module



SAM C21 Motor Control PIM
(Part # MA320206)



Product Features:

SAM C2x Series Features

SAM C Cortex-M0+ based microcontroller (MCU) series builds on decades of innovation and experience in embedded Flash microcontroller technology. It not only sets a new benchmark for flexibility and ease-of-use but also combines the performance and energy efficiency of an ARM Cortex-M0+ based MCU with an optimized architecture and peripheral set. SMART SAM C devices are truly differentiated 5V microcontrollers that are ideal for home appliances, industrial control and other 5V applications.

- ARM Cortex-M0+ based MCU running up to 48MHz
- Up to 256KB embedded Flash and 32KB SRAM
- 2.7V to 5.5V operating voltage
- Controller Area Network (CAN) interface supporting ISO CAN-FD; ISO 11898-2:2015
- DMA and Event system
- Up to eight flexible serial communication modules (SERCOM)
- 12-bit ADC
- 16-bit Sigma-Delta ADC (SDADC)
- Temperature sensor
- Divide and square root accelerator (DIVAS)
- Hardware touch support with the Peripheral Touch Controller
- QFP, QFN and WLCSP package options