ATC 2070-1C CPU Module

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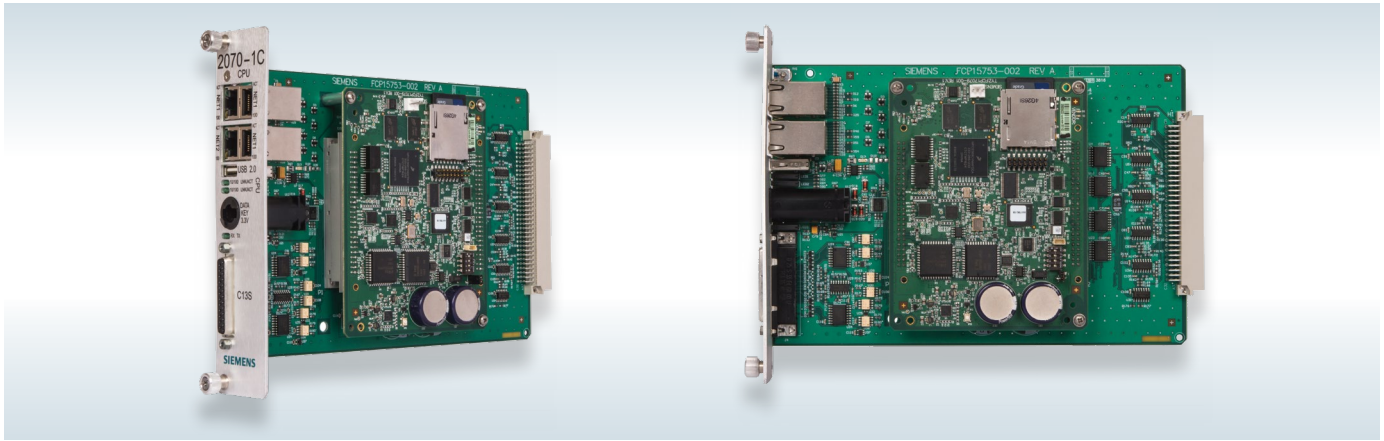### CPU module description

The Linux-based 2070-1C module is a versatile CPU that brings the power of the next generation ATC controller to the 2070 platform while giving a scalable, cost-effective upgrade alternative for all model 2070 controllers compliant to TEES 2002 and TEES 2009.

Benefits include

- The 2070-1C provides an inexpensive and functional data security option for added support and convenience, leveraging existing investments

- Compatible with current NEMA, ITS and CALTRANS TEES 2002 and 2009 specifications

Features

- Open architecture Linux 2.6.39 operating system

- Network security with web interface management console

- Compatible with approved TEES 2002 and TEES 2009 2070 hardware

- Capable of running multiple applications

- Environmentally hardened

- Board support package available for third party software development

- Flexible data storage options via USB, Datakey and SDHC memory devices

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Highlights

- Open Architecture ensures compatibility with off-the-shelf products
- Standard Linux operating system
- Standard software modules from multiple sources
- Multitasking – each 2070-1C unit can control multiple applications
- High speed serial communications to CPU
- The ATC Engine board is a low-power design and particularly resistant in tough environmental conditions

Operating system features

- Embedded real time Linux Kernel
- All Linux drivers compliant to AASHTO, ITE and NEMA ATC 5201 version 6.25
- Embedded software utilities:
  - Flash drive
  - RAM drive
  - MFIT validation suite for self-testing per ATC standard 5.2b

Technical specifications

- NXP MPC8309 333 MHz PowerQUICC™ II Pro embedded microprocessor
- Linux version 2.6.39
- 256 Megabytes of DRAM
- 512 Megabytes of FLASH
- 2 Megabytes of SRAM
- 2 Internal QUICC SDLC ports
- 2 Internal UART ports
- 3 External Zilog Z85230 UART/SDLC ports
- Supports 1 removable SDHC Memory card
- 4 IEEE 802.3-2002 10/100 Base-T Ethernet ports with auto switching capability
  - 3 back haul ports
  - 1 local port
- 2 Ethernet switches
- Supports 1 USB 2.0 high-speed devices
- Supports 5V and 3.3V Datakeys up to 32 Megabits
- Includes C/C++ Libraries: libstdcc++.so.6.0.17 and glibc 2.19
- Caltrans TEES 2002/2009 compliant D type 25 pin C13S port
- Operating ambient temperature from -37 °C to +74 °C

Ordering information

- Part Number: AAD15753-002