2070LX CONTROLLER

35X/34X/33X/170 STYLE TRAFFIC SIGNAL CONTROLLER

OVERVIEW

The 2070LX controller is part of Q-Free's industry-leading ATC-compliant, Linux-based hardware platform.

The controller meets and exceeds current ATC, Caltrans, and NTCIP standards providing agencies with a robust, industry-leading, open architecture hardware platform.

Utilizing a Linux-based operating system that meets and exceeds current ATC, NEMA, and NTCIP standards, the 2070LX Controller provides agencies with a robust, scalable platform to meet transportation needs today and tomorrow.

The 2070LX is available with a legacy PowerPC processor for agencies that require Caltrans TEES chip set compliance or a modern Velocity™ V^5 ARM processor with massively increased power and performance.

BENEFITS

- Fast, reliable intersection control
- Powerful CPU with expandable memory configurations
- Schedule updates or run live
- Install firmware and operating system updates without placing the controller in flash
- Compatible with ATC, Caltrans, and NEMA cabinets
- Exceeds latest ITE/NEMA/AASHTO ATC standard
- Unrestricted use license for MIBs
- Built and sourced in the USA for full BABA compliance

Legacy PowerPC or ARM processor

Built-in web server

Field-proven, durable design

Secure communication

MODERN PLATFORM

OPEN ARCHITECTURE

- Linux operating system
- Linux and API library
- Software development kit (SDK) provided at no charge to qualified ATC software developers
- Unrestricted use license for NTCIP MIBs

COMMUNICATION INTERFACES

- 3.3v DataKey socket
- 10/100 Mbit Ethernet ports (5)
- USB (1)
- SD Card (1)
- TEES compliant D type 25 pin C13S port

CABINET INTERFACES

- ATC cabinets
- Caltrans cabinets
- NEMA cabinets
- ITS cabinets

INDUSTRY STANDARDS

- ATC 6.25 and Caltrans 2020 TEES, ATC 5401 API as an option
- Exceeds Caltrans 2009 TEES (2070-1C)
- NTCIP 1201, 1202, 1211, and applicable base standards

PROCESSING & MEMORY

ENGINE BOARD CPU SPECIFICATIONS*		
	Velocity V^5 ARM	Legacy PowerPC
Processor:	Quad-core 1.6 GHz ARM Cortex A53 CPU with 800 MHz ARM Cortex M7 coprocessor	NXP MPC8248 32-bit, 400 MHz PowerPC Instruction
Neural Processing Unit for AI/ML:	✓	—
DRAM:	4,096MB (4GB)	128MB
Flash memory:	32,768MB (32GB)	64MB
Industry standards:	Exceeds Caltrans TEES functional specifications	Exceeds/Meets Caltrans TEES functional & chip set specifications

* All models fully 2070 hardware and software compliant with the latest ITE/NEMA/AASHTO ATC standard

TECHNICAL SPECIFICATIONS

Form factor:	EIA 19" rack mount
Dimensions* (HWD):	7" x 19" x 13" 18 x 48 cm x 33 cm
Power:	Variable power supply (89-250 VAC 50/60 Hz, or 48VDC)
Power connector:	2070-4A heavy-duty power supply
Temperature:	-40°C to +80°C

Dimensions rounded to nearest 1.0

USER INTERFACE

- 2070-3B 8 line x 40 character LCD display
- 4x4 and 3x4 tactile keyboards

I/O MODULE OPTIONS

- 2070LDX includes 2070-2A/2E/2E field I/O module for parallel interface to 170/170E/2070 cabinets
- 2070LDX-2N includes a field I/O module for serial interface with ITS and NEMA TS 2 type 1 cabinets
- 2070LDX-N includes 2070-N1 extensions for TS 1 & TS 2 type 2 cabinets
- 2070LDX-B includes a field I/O module for interface to ITS cabinets and other RS-485 peripherals

◁ *2070-1C CPU module (available with Legacy PowerPC or Velocity V^5 ARM processor)*