MEPNN Supplier Scouting Opportunity Synopsis

Section 1: General Information

Scouting Number	2025-231
Item to be Scouted	2070LX Traffic Signal Controller
Days to be scouted	30
Response Due By	08/09/2025
Description	The Traffic Signal Controller Unit shall be composed of the Unit Chassis, Modules and Assemblies per their version. The 2070LX Traffic Signal Controller consists of: 2070LX + UNIT CHASSIS, 2070-1C CPU, 2070-2E+ (2C Serial Motherboard, Back-plane Mounting Surface, Power Supply Module Supports, slot card guides, Wiring Harnesses, and Cover Plate(s). Required plugin modules will be covered by separate waivers.

Section 2: Technical Information

Type of supplier being sought	Manufacturer
Reason	BABA
Describe the manufacturing processes (elaborate to provide as much detail as possible)	The manufacturing process of the 2070LX traffic signal controller involves several key stages, focusing on modular assembly, rigorous testing, and compliance with industry standards. 1) Manufacturers source high-quality components, including CPU Modules, Memory Modules, Communication Modules, & Power Supply Units. These components are sourced from suppliers and undergo quality assurance checks to ensure they meet the specifications outlined in Caltrans TEES 2020. 2) The assembly process includes Chassis Assembly, Module Installation, & Front Panel Integration. 3) The 2070LX operates on a Linux-based real-time multitasking operating system. The software installation process involves: Operating System Installation, Application Software Installation & Configuration. 4) Before deployment, the 2070LX undergoes rigorous testing to ensure functionality and reliability: Functional Testing, Performance Testing, Environmental Testing, & Compliance Testing. 5) Once testing is complete, the 2070LX controllers are Packaged, Labeled & Shipped.
Provide dimensions / size / tolerances / performance specifications for the item	Dimensions: 19 in (W) × 7 in (H) × 10.25 - 13 in (D), EIA rack-mount equipment. Power Input (89–135 VAC, 60 Hz ±3 Hz); Operating Temp (-37 °C to +74 °C); Operating System (Real-time Linux with ATC-compliant board support package); Controller CPU Module (MPC8360E Freescale PowerQUICC II Pro); Memory (256 MB DRAM, 16 MB NOR Flash + 256 MB NAND Flash, 2 MB nonvolatile SRAM, SD card slot for storage/expandability); Communications (up to 5 SDLC ports, up to 7 Serial asynchronous, Ethernet, USB port); Front panel (8×40 character display, 3×4 navigation keypad, 4×4 data keypad); Rear cabinet interfaces (C1S, C11S, C12S connectors). Ship Weight ~12 lbs. per controller.
List required materials needed to make the product, including materials of product components	Chassis / frame is Aluminum (5052/6061), anodized or powder coated. Mounting plates / brackets are Aluminum or zinc-plated steel. Fasteners are Stainless steel or zinc-plated steel. PCBs are FR4, copper, epoxy solder mask, ENIG finish. ICs & chips are Silicon in molded plastic / ceramic. Capacitors are Ceramic, tantalum, aluminum. Inductors & transformers are Copper, ferrite cores. Connectors are Thermoplastics, copper alloys, gold/tin. Power supply shielding is Aluminum or steel. Keypad / LEDs / displays are Silicone rubber, polycarbonate, gallium compounds, glass. Environmental seals / gaskets are Silicone, EPDM, closed-cell foam rubber, Storage interfaces are Plastic housings, copper contacts.
Are there applicable certification requirements?	No

The following values appear in the overlapping rows under "Type of supplier being sought" and "Reason":
- BABA (Reason)
- California (location)

Are there applicable regulations?	No
Are there any other stndards, requirements, etc.?	Yes
Details	Caltrans TEES 2020
Additional Technical Comments	

Section 4: Business Information

Estimated potential business volume	2-5 year contract. 400-600/year
Estimated target price / unit cost information (if unavailable explain)	$2,495 each
When is it needed by?	4/29/2026
Describe packaging requirements	Individually boxed, Palletized (for bulk shipment), banded with plastic strapping and covered with a stretch film wrap to prevent dust and movement.
Where will this item be shipped?	Sacramento, California

Additional Comments

Is there other information you would like to include?	Agency - Federal Highway Authority (FHWA) Contact - Andrew Bianchi, Project Delivery North Team Leader, Federal Highway Administration, California Division andrew.bianchi@dot.gov