

## Quora™ A-series

Rugged Systems for Power-Constrained  
Mission Critical Computing



- Ideal for power-constrained mission critical applications
- Commercial off-the-shelf (COTS) technology for cost-effective flexibility
- Size, weight, and power (SWaP) optimized for mobile platforms
- Designed for high reliability in extreme environments
- Customizable for program specific requirements

Quora™ is a family of rugged embedded computers designed for use in mission critical airborne, ground and shipboard applications. Quora systems are designed and built around rugged, small form factor (SFF) COTS-based subsystems. They are modular and expandable, with state-of-the-art processors, powerful graphics and data processing options available to satisfy a wide variety of mission requirements. Consisting of pre-integrated and pre-qualified subsystems, our mission computers help get your program validated and deployed faster, while minimizing the costs and risks associated with a new design effort. Quora tactical mission computers are ideal for use in C4ISR technology refresh and platform upgrade programs under thermal, shock and vibration extremes in unmanned and manned aircraft, ground vehicles, and maritime platforms.

The Quora A-series™ features Intel® Atom™ E38xx processors; with up to four cores, 4GB of RAM and 8GB of eMMC. Designed for use in power-constrained applications, the A-series has a typical power draw of 15W while maintaining a high level of computational and I/O capabilities. It has been tested and certified for use in extreme environments, including extended temperatures, shock and vibrate, and fire and smoke. Available with flexible CPU, power supply, memory, storage and I/O subsystem options, A-series computers can be customized and certified to meet specific application or program requirements

## Quora™ A-series

System Specifications	
<b>Processor</b>	Intel® Atom™ E3845, 1.91GHz, Quad Core; E3827, 1.75GHz, Dual Core; E3815, 1.46GHz, Single Core
<b>Memory</b>	RAM: Up to 4GB 1333MHz (DDR3L ECC) Embedded: 8GB eMMC (Optional mSATA Module)
<b>Storage</b>	One (1) Removable Drive Bay for up to Two (2) 2.5" Drives (with Key Lock) One (1) microSD Slot (Service Panel)
<b>Video Output</b>	One (1) Micro HDMI (Service Panel); Optional: One (1) HDMI (Circular Connector)
<b>Standard IO</b>	Two (2) USB 2.0 noise and surge protected. One (1) USB 2.0 (Service Panel) Two (2) Gigabit Ethernet (GigE), M12 X-coded connector Two (2) RS-232/422/485 (9-wire) Isolated; Two (2) RS-485/RS-422 (5-wire); One (1) TTL Console (Service Panel) Two (2) CAN bus 100mA with 5V Power Out, Isolated Four (4) Digital I/O, One (1) Odometer, One (1) Ignition Key (All DI/O Isolated, EN50155), 24V One (1) Audio IN, One (1) 2W Class D Stereo OUT
<b>Radio Interfaces</b>	One (1) LTE Cat 4 Modems GPS with Dead Reckoning 802.11 a/b/g/n, BLE 4.0 External Antennas: Up to 2 SMA Cellular 2 RSMA Wi-Fi/BT, 1 SMA GPS 2 Single SIM, Switchable for Bandwidth Aggregation and Carrier/Cellular Backup (Service Panel)
<b>Other</b>	RTC with SuperCAP (up to 2 Month Retention) Optional TPM 1.2/2.0 Temperature Sensor, Accelerometer LEDs: One (1) Power, Three (3) Activity, Four (4) Programmable
<b>Expandability</b>	Three (3) Full/Half Size Mini PCIe Slots (PCIe/USB/mSATA); MIL-STD-1553
<b>Power</b>	Input: 9 - 137.5VDC Wide Input Range, EN50155 Class S2 for 24VDC and 110VDC Nominal Voltage Inputs Consumption: 15W Typical, 30W Max
<b>Environmental</b>	Fanless and ventless Operating Temp: -40 to +70°C Storage Temp: -40 to +85°C
<b>Mechanical</b>	Material: Aluminum - Black Anodized Ingress: IP-66 Dimensions: 268 x 141 x 85mm / 10.5 x 5.5 x 3.3in (L x W x H) Weight: 3.7kg /8lbs
<b>OS Support</b>	Linux, Windows 10 Pro
<b>Ruggedization</b>	Designed to MIL-810 Temperature, Shock and Vibration standards

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Since 1981, Dynatem has been a trusted supplier of rugged and secure mission-critical solutions for defense and aerospace applications. We are proven experts in designing and building rugged, small form factor technology products for use in harsh environments. Dynatem solutions can be found in mission-critical defense systems around the world—powering airborne, ground and shipboard deployments.