



# MILTECH™ 300-HoB

Military Grade USB 3.1 advanced featured Smart HUB On Board (USBHoB)

## PRODUCT DESCRIPTION

The MILTECH™ 300-HoB USB hub enables the connectivity and communication between multiple USB devices and the main computer. This USB hub features 6 USB 3.1 ports each of them also supports battery charging functionality along with regular USB3.1 data path, a dedicated IO port (I<sup>2</sup>C, External Power and GPIO compatible), and a single gigabit Ethernet port.

With a wide input voltage range of 12-28VDC and up to 2A downstream power per port for either charging or powering devices. The MILTECH 300-HoB supports the four most popular battery charging profiles (DCP,

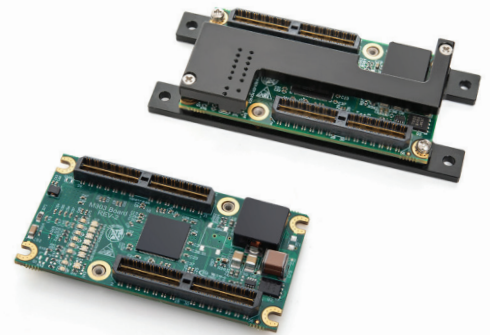
CDP, SDP and custom profiles) to power and charge USB devices including: portable handhelds, storage, sensors, human interface devices and GPS.

The internal Ethernet interface allows to communicate with upstream devices over a standard Ethernet network, further extending the flexibility of the hub and attached USB devices.

MILTECH™ 300 designed to withstand MIL-STD-810 environmental compliance and MIL-STD-461 EMI/RFI compliance when installed in an appropriate chassis.

## SPECIFICATIONS

<b>COMMUNICATION PORTS</b>	<ul style="list-style-type: none"> <li>Port 1 USB3.1/USB2 upstream port</li> <li>Port 2-6 USB3.1/USB2 downstream ports</li> <li>Port 7 Ethernet 10/100/1000BT port via USB to LAN Bridge</li> <li>Port 8 IO port for I2C/GPIO/External Power Input</li> <li>Per port LEDs indication</li> </ul>
<b>CONNECTORS</b>	<ul style="list-style-type: none"> <li>2 x Samtec QTE-028-01-L-D-DP-A-K</li> </ul>
<b>STANDARDS</b>	<ul style="list-style-type: none"> <li>MILSTD-461, MILSTD-810, IP68</li> <li>When installed in an appropriate chassis</li> </ul>
<b>BATTERY CHARGE</b>	<ul style="list-style-type: none"> <li>High Power Chargers for most popular battery powered devices, via all USB 3.1 downstream ports, up to 2A per port.</li> <li>Supports the following USB-IF BC1.2 charging profiles:                             <ul style="list-style-type: none"> <li>- DCP: Dedicated Charging Port (Power brick with no data)</li> <li>- CDP: Charging Downstream Port (1.5A with data)</li> <li>- SDP: Standard Downstream Port (0.5A with data)</li> <li>- Custom profiles loaded via SMBus</li> </ul> </li> <li>All downstream ports support individual port power control, over-current &amp; Short circuit protection.</li> <li>Over voltage / Reverse Voltage protections for Self-Powered and VBUS-powered supply sources.</li> <li>USB ESD Protection up to 17KV (Air) and 12KV (Contact).</li> </ul>



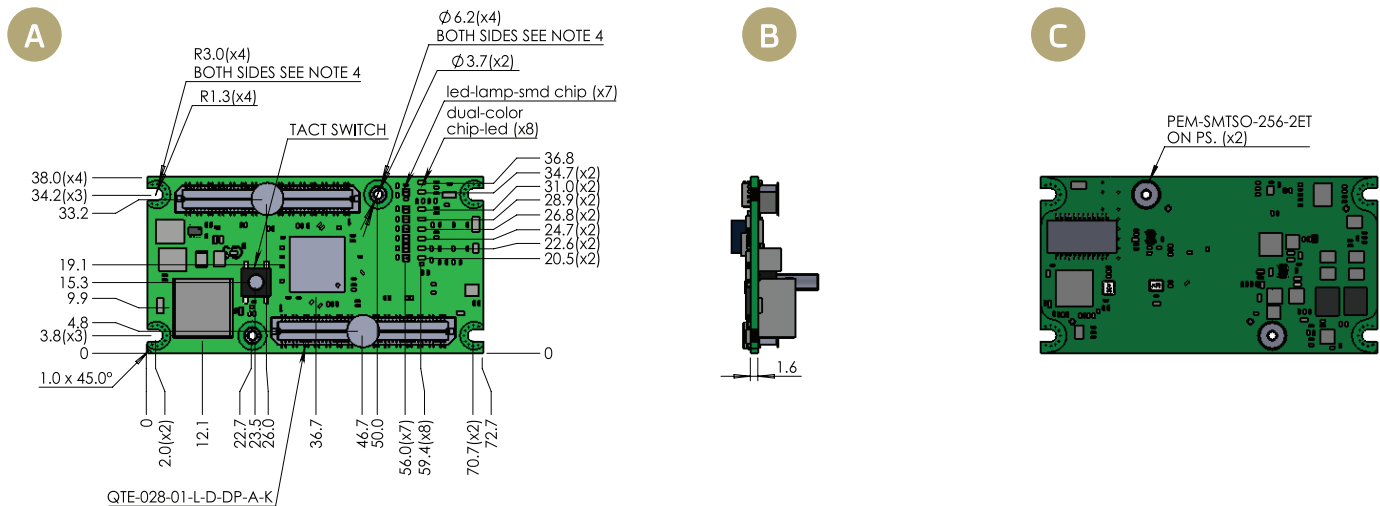


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## SPECIFICATIONS

<b>STANDARDS COMPLIANCE</b>	<ul style="list-style-type: none"> <li>• USB 3.1 (Gen1) Specification - supports 5Gbps SuperSpeed (SS)</li> <li>• 480Mbps High-Speed (HS)</li> <li>• 12Mbps Full-Speed (FS)</li> <li>• 1.5Mbps Low-Speed (LS)</li> </ul>
<b>POWER</b>	<ul style="list-style-type: none"> <li>• 5VDC (USB) INPUT via Upstream USB Port, or 12-28VDC external power via I/O Power Connector, for high power applications.</li> <li>• Output 5VDC Aggregated up to 15A, and up to 2A per port</li> </ul>
<b>ELECTROMAGNETIC</b>	<ul style="list-style-type: none"> <li>• MIL-STD-461 Electromagnetic compatibility when installed in an appropriate chassis</li> </ul>
<b>PHYSICAL</b>	<ul style="list-style-type: none"> <li>• Dimensions: 73mm (L) x 38mm (W) x 11mm (H)</li> <li>• Weight: 24.2gr</li> </ul>
<b>INSTALLATION</b>	<ul style="list-style-type: none"> <li>• Portable, 4 screws for mounting to any flat surface</li> </ul>
<b>COOLING</b>	<ul style="list-style-type: none"> <li>• No Moving Parts. Passive Cooling</li> </ul>
<b>TEMPERATURE</b>	<ul style="list-style-type: none"> <li>• Operational: -40°C to +85°C (-40°F to +185°F) - Cold Start-Up</li> <li>• Storage: -45°C to +85°C (-49°F to +185°F)</li> </ul>



## ORDERING INFORMATION

PART NUMBER	DESCRIPTION
1-300-000	Military Grade USB 3.1 Smart HUB On Board
1-CP300-000	Cooling base plate for MILTECH300

