

SHIELD-156-U

IEI Stainless Steel Industrial Panel PC

Powered by Intel Meteor Lake Processor

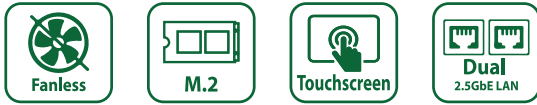


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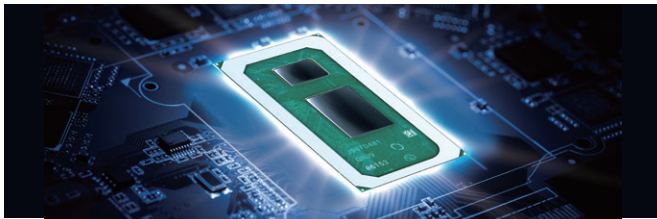
SHIELD-156-U

Stainless Steel Panel PC equips Intel Meteor Lake Processor , Preinstalled with 16GB SO-DIMM DDR5, PCAP touch, 10~28V DC, 304 Stainless Steel Chassis, Full body IP69K Rated With Water-Proof Connectors.



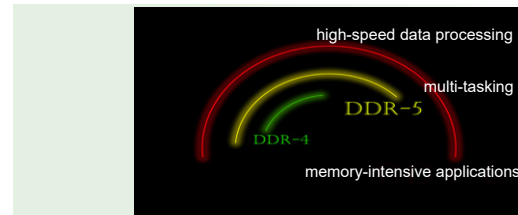
Excellent processor performance

Meteor Lake is Intel's new-generation mobile processor platform (Core Ultra 100 series). It features a disaggregated, tile-based design using Intel Foveros 3D packaging, combining Performance-cores and Efficient-cores (Crestmont) to deliver improved performance per watt. It also integrates an NPU to accelerate AI workloads while maintaining high energy efficiency.



Next Gen high-speed memory

Compared to DDR4, DDR5 has the advantage of its wider bandwidth and lower power consumption, supporting high-speed data processing, multi-tasking, and memory-intensive applications.



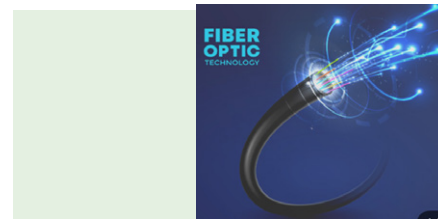
Comprehensive stainless steel solutions

The Shield Series features a corrosion-resistant 304 stainless steel housing with fully waterproof ports. And it has longer life cycle and lower maintenance costs



High-Speed Transmission Optical Fiber Module

Optical fiber can support ultra-large bandwidth to meet high-speed transmission requirements. Effectively reduce signal attenuation enabling high-quality transmission over long distances.



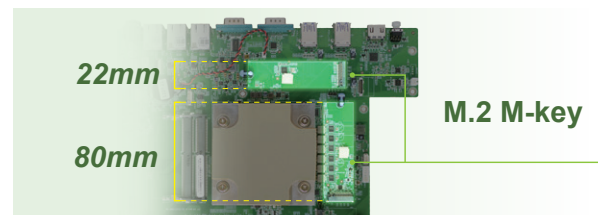
Seamless Connections

SHIED series is all equipped with M12/M20 waterproof connectors with easy installation. Providing seamless and stable signal transmissions.

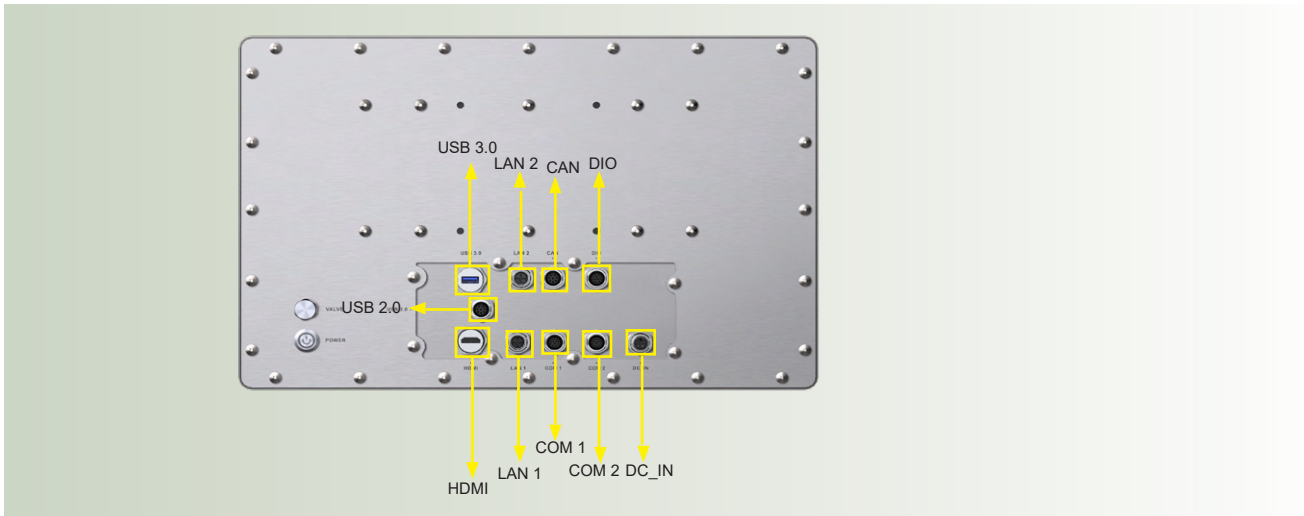


Multiple M.2 Expansions

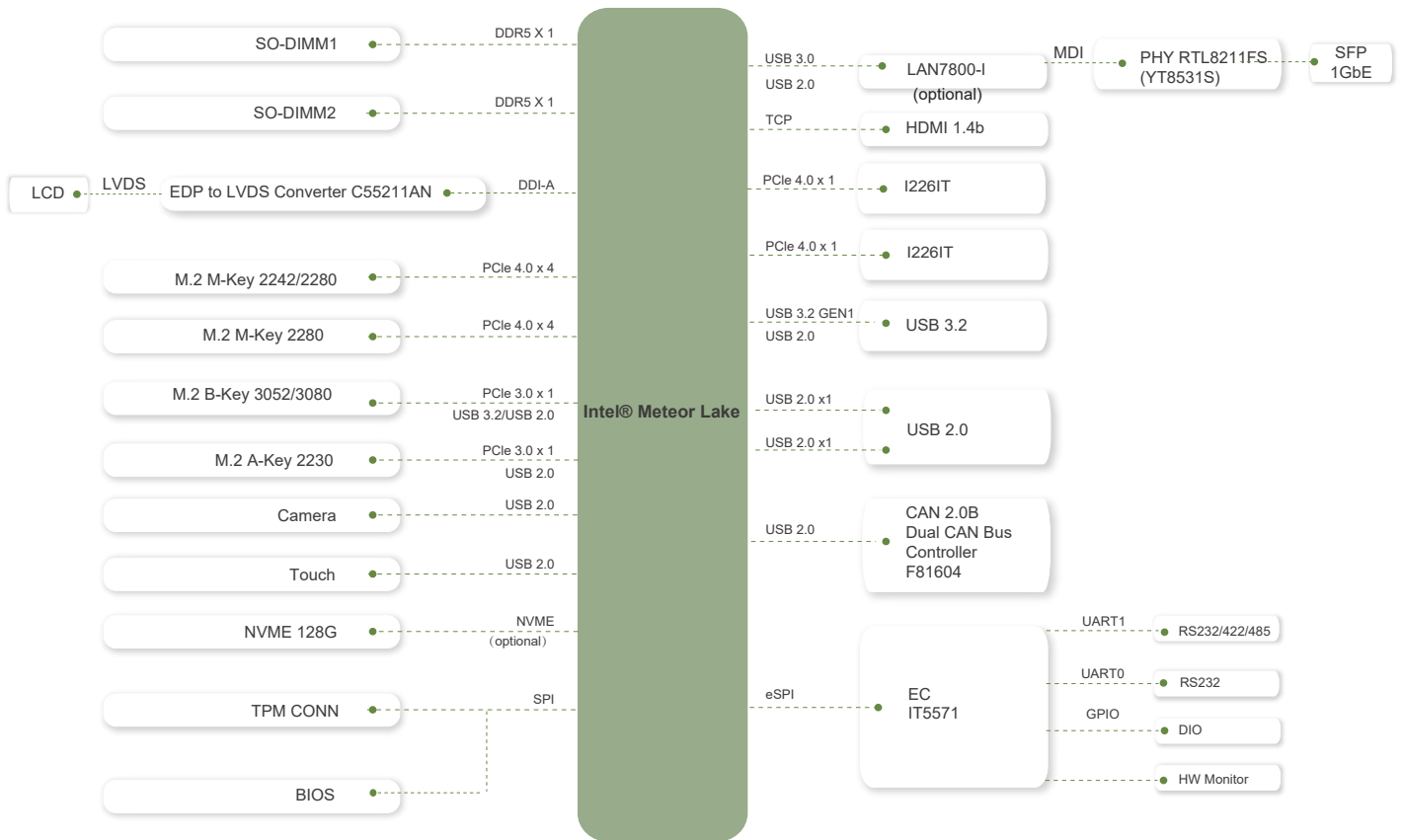
SHIELD series features various M.2 expansion slots, providing users with flexible expansion space for different application scenarios.



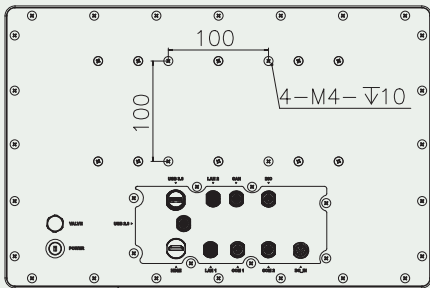
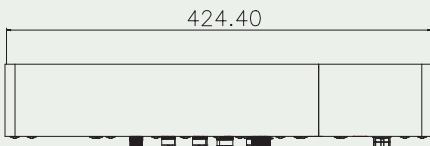
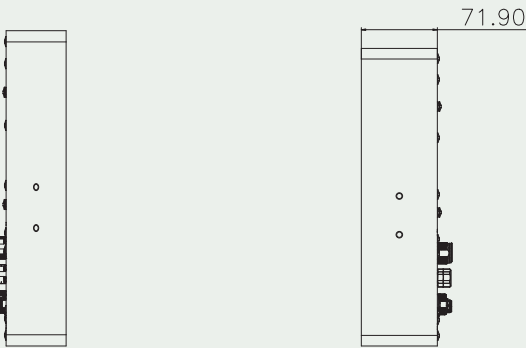
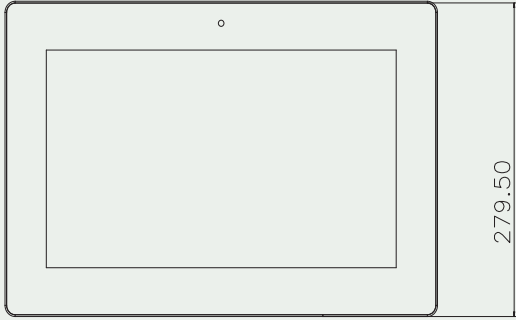
Fully Integrated I/O



Block Diagram



Dimensions (Unit: mm)



Specifications

| Model | SHIELD-156-U |
|-------------------------------------|--|
| LCD Display | 15.6" |
| Resolution | 1920 (W) x 1080 (H) |
| Brightness | 450 cd/m ² |
| Contrast Ratio | 800:1 |
| LCD Color | 16.2M |
| Pixel Pitch (mm) | 0.179 (H) x 0.179 (V) |
| Viewing Angle (H-V) | 178°/178° |
| Backlight MTBF | 50000 hours |
| Touchscreen | Multi-point projected capacitive type (anti-UV / anti-glare coating, support gloves) Surface hardness: ≥7H |
| Touch Controller | Projected capacitive type: ILI2520 |
| CPU (SoC) | Intel® Meteor Lake Ultra 5 processor 125U Intel® Meteor Lake Ultra 7 processor 155U |
| Memory | 2 x SO-DIMM DDR5-4800 up to 96GB (Pre-installed 16GB) |
| Ethernet | 2 x 2.5GbE LAN via Intel I226-IT |
| Storage | 1 x M-Key 2280 (PCIe Gen4 x4) for M.2 SSD 1 x 128GB eMMC (optional)* |
| Expansion slot | 1 x M.2 M-Key 2242/2280 (PCIe Gen4 x4) 1 x M.2 B-Key 3052/3080 (PCIe Gen3 x1 + USB 3.2 x1) 1 x NANO-SIM 1 x M.2 A-key 2230 (PCIe Gen3 x1 + USB 2.0 x1) |
| Camera | 1 x Camera (Wide-viewing angle) |
| External I/O Interface | M12 Waterproof Connector for 2 x RJ-45 2.5GbE LAN M12 Waterproof Connector for 1 x RS-232(with 2.0 kV isolation) M12 Waterproof Connector for 1 x RS-232/422/485(with 2.0 kV isolation) M12 Waterproof Connector for 1 x CANBUS(with 2.0 kV isolation) M12 Waterproof Connector for 1 x 8bit DIO (Isolator) (with 1.6 kV isolation) with SMBus M12 Waterproof Connector for 1 x USB2.0 M20 Waterproof Connector for 1 x USB3.0 M20 Waterproof Connector for 1 x HDMI 1.4b Waterproof Connector for Power switch M12 Waterproof Connector for DC Input Power |
| Construction Material | 304 Stainless Steel Chassis |
| Mounting | VESA Mount 100 x 100 / Pole Mount / YOKE Mount |
| IP Rating | Fully IP69K |
| Power Input | DC 10~28V |
| Operating Temperature(with airflow) | -10~55°C @50%RH |
| Storage Temperature | -40°C~70°C |
| Humidity | 10 to 90%RH @ 40°C, non-condensing |
| Safety and EMC | CE/FCC |
| OS | Windows 10/11 IoT Enterprise 64-bit Linux |
| Dimensions(H x W x D) (mm) | 424.4 x 279.5 x 71.9 |
| Weight(Net/Gross) | 8.5/15.1Kg |

*Based on project discussion, it might have MOQ criteria. Please contact with Sales Account.

Ordering Information

| | |
|---------------------|---|
| SHIELD-156-U5AD-R10 | 15.6" 450cd/m ² 1920x1080 Panel PC with Intel® Core™ Ultra 5 processor 125U , Preinstalled with 16GB DDR5, PCAP touch, 10~28V DC, 304 Stainless Steel Chassis, Full Body IP69K Rated With Water-Proof Connectors , R10 |
| SHIELD-156-U7AD-R10 | 15.6" 450cd/m ² 1920x1080 Panel PC with Intel® Core™ Ultra 7 processor 155U , Preinstalled with 16GB DDR5, PCAP touch, 10~28V DC, 304 Stainless Steel Chassis, Full Body IP69K Rated With Water-Proof Connectors , R10 |

Packing List

| | | |
|-----------------|------------------|---------------|
| 1 x Power Cable | 1 x USB2.0 Cable | 1 x LAN Cable |
|-----------------|------------------|---------------|

Options

| Item | Part No. | Length | Description |
|-------------------|------------------------|----------|--|
| LAN cable | 32013-007300-100-RS | 1000mm | M12 X code 8pin Male to RJ45 Female |
| USB 2.0 cable | 32001-033000-100-RS | 1000mm | M12 A code 8pin Male to USB Type-A female X2 |
| DIO cable | 32031-000700-100-RS | 1000mm | M12 A code 12pin Male to HDB15 Male |
| COM cable | 32005-006300-100-RS | 1000mm | M12 A code 9pin Male to DB9 Male |
| CAN cable | 32005-006400-100-RS | 1000mm | M12 A code 8pin Male to DB9 Male |
| USB3.0 cable | 32001-033200-100-RS | 1000mm | waterproof Type-A Male to USB3.0 Type-A female |
| HDMI CABLE | 32012-003800-100-RS | 1000mm | waterproof Type-A Male to HDMI Type-A female) |
| Item | Part No. | Quantity | Description |
| YOKE MOUNT | 41320-0594C0-00-HF | 1 | Yoke Mount Bracket |
| SCREW | 44040-050161-HF | 2 | M5*16 Pan Head Machine Screw |
| | 44030-050121-HF | 2 | M5*12 Round Head Machine Screw |
| iuOF-1G1PW-WF-R10 | 70-034SB104-001-100-RS | 1 | IEI 1G USB optical fiber Module |