

# SHIELD-156

## IEI Stainless Steel Industrial Panel PC

Powered by Intel Amston Lake Processor



www.ieiworld.com



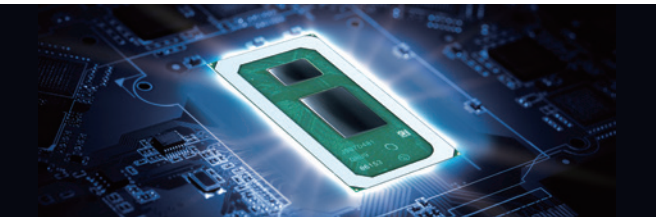
# SHIELD-156

Stainless Steel Panel PC equips Intel Amston Lake Processor , Preinstalled with 8GB SO-DIMM DDR5, PCAP touch, 10~28V DC, 304 Stainless Steel Chassis, Full body IP66 Rated With Water-Proof Connectors.



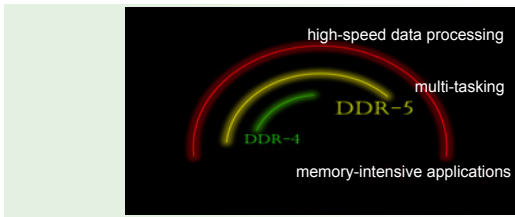
## Excellent processor performance

Amston Lake is a new generation mobile processor launched by Intel. It uses Intel's ultra-low power technology and the latest Gracemont core, with higher performance and lower energy consumption.



## 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.



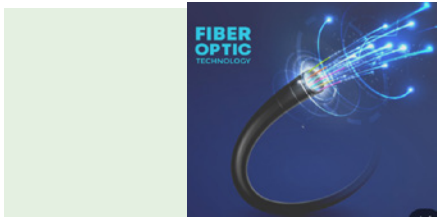
## Comprehensive stainless steel solutions

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.



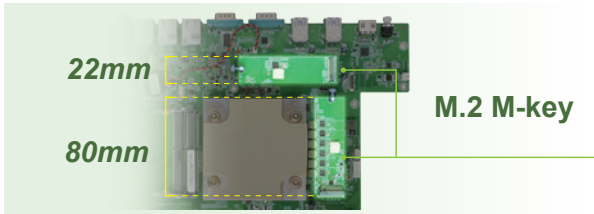
## Seamless Connections

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

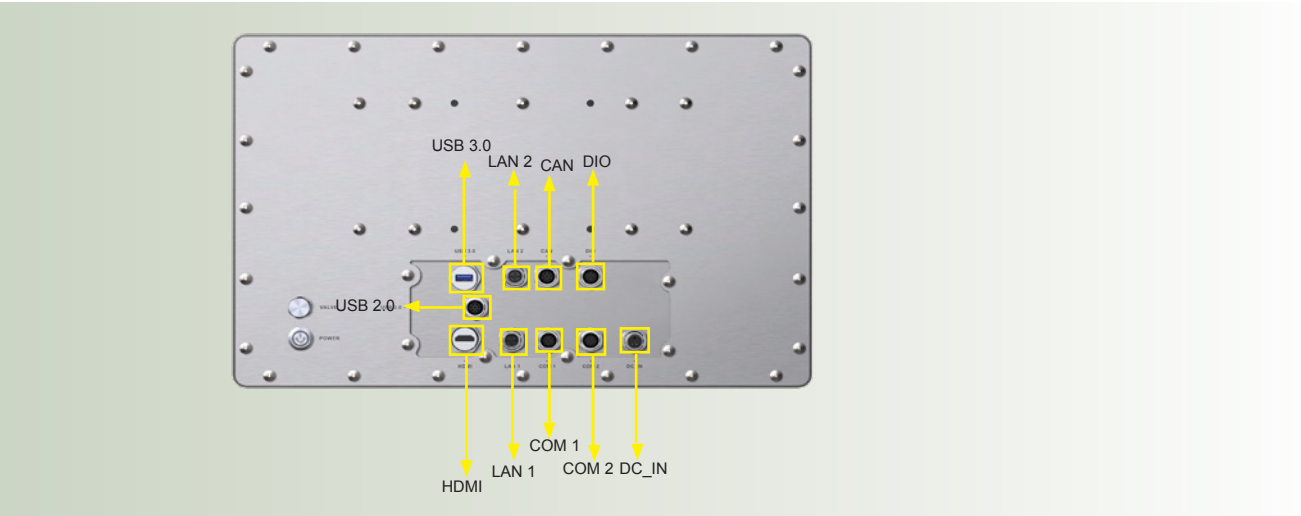


## Multiple M.2 Expansions

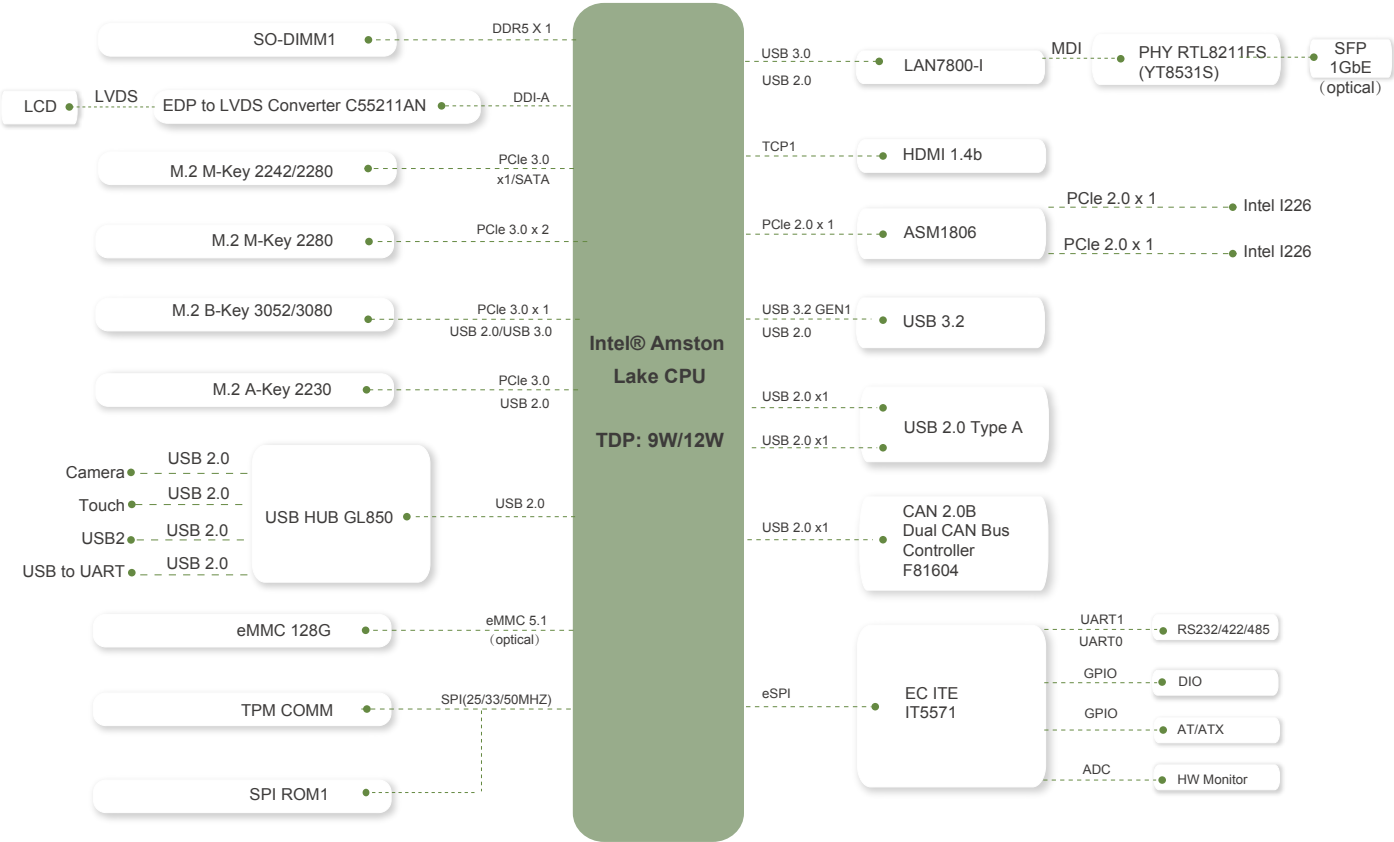
SHIELD series features various M.2 expansion slots, providing users with flexible expansion space for different application scenarios.



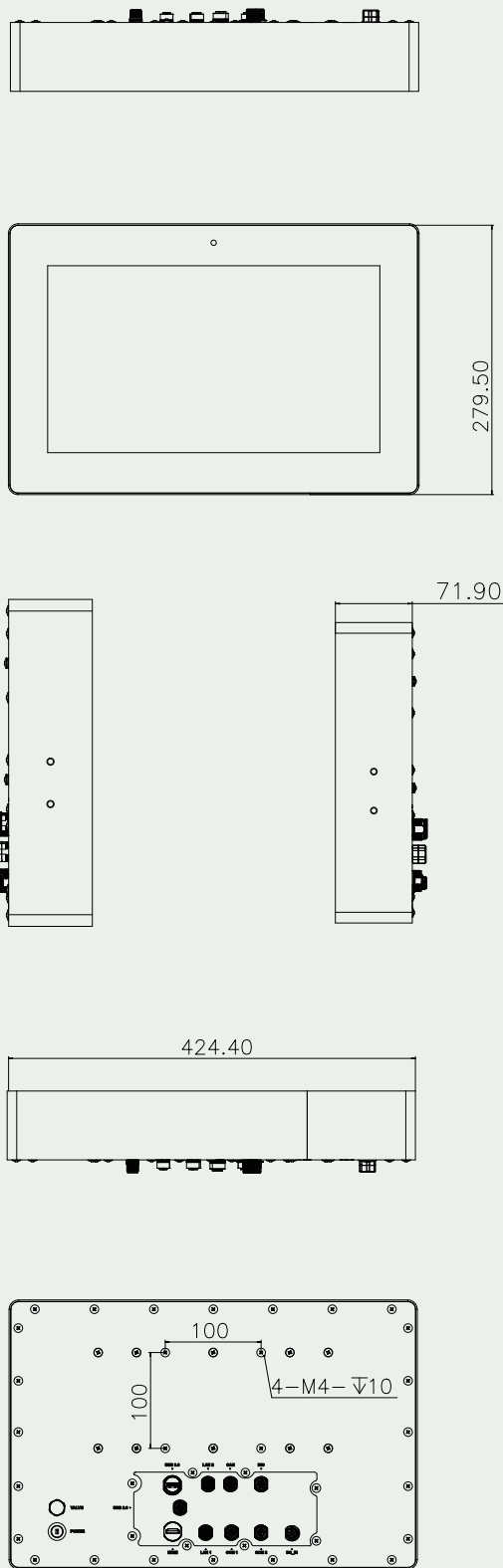
Fully Integrated I/O



Block Diagram



## Dimensions (Unit: mm)



## Specifications

Model	SHIELD-156
LCD Display	15.6"
Resolution	1920 (W) x 1080 (H)
Brightness	450 cd/m <sup>2</sup>
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 Atom® x7433RE Processor 6M Cache, up to 3.40 GHz / TDP 9w Intel Atom® x7835RE Processor 6M Cache, up to 3.40 GHz / TDP 12w
Memory	1 x SO-DIMM DDR5-4800 up to 16GB (Pre-installed 8GB) (ECC supported)
Ethernet	2 x 2.5GbE LAN via Intel I226-IT
Storage	1 x M-Key 2280 (PCIe Gen3 x2) for M.2 SSD 1 x 128GB Emmc ( optional )*
Expansion slot	1 x M.2 M-Key 2242/2280 (PCIe Gen3 x1 + SATA) 1 x M.2 B-Key 3052/3080 (PCIe Gen3 x1 + USB 3.0 x1) 1 x NANO-SIM 1 x M.2 E-key 2230 (PCIe Gen3 x1 + USB 2.0 x1) for optional WIFI/BT module
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 IP66
Power Input	DC 10~28V
Operating Temperature(with airflow)	-30°C~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

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

## Ordering Information

SHIELD-156-R3C-R10	15.6" 450cd/m <sup>2</sup> 1920x1080 Panel PC with Intel® Atom x7433RE Processor, TDP 9W, Preinstalled with 8GB DDR5, PCAP touch, 10~28V DC, 304 Stainless Steel Chassis, Full body IP66 Rated With Water-Proof Connectors , R10
SHIELD-156-R4C-R10	15.6" 450cd/m <sup>2</sup> 1920x1080 Panel PC with Intel® Atom x7835RE Processor, TDP 12W, Preinstalled with 8GB DDR5, PCAP touch, 10~28V DC, 304 Stainless Steel Chassis, Full body IP66 Rated With Water-Proof Connectors , R10

## Packing List

1 x Power Cable	1 x USB2.0 Cable	1 x LAN Cable
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## 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
iiOF-1G1PW-WF-R10	70-034SB104-001-100-RS	1	IEI 1G USB optical fiber Module