

# MBox-Advanced

## x86 Family



**Industrial Firewall and BoxPC platform based on Intel Atom® E3900 processor series.**

### HIGHLIGHTS

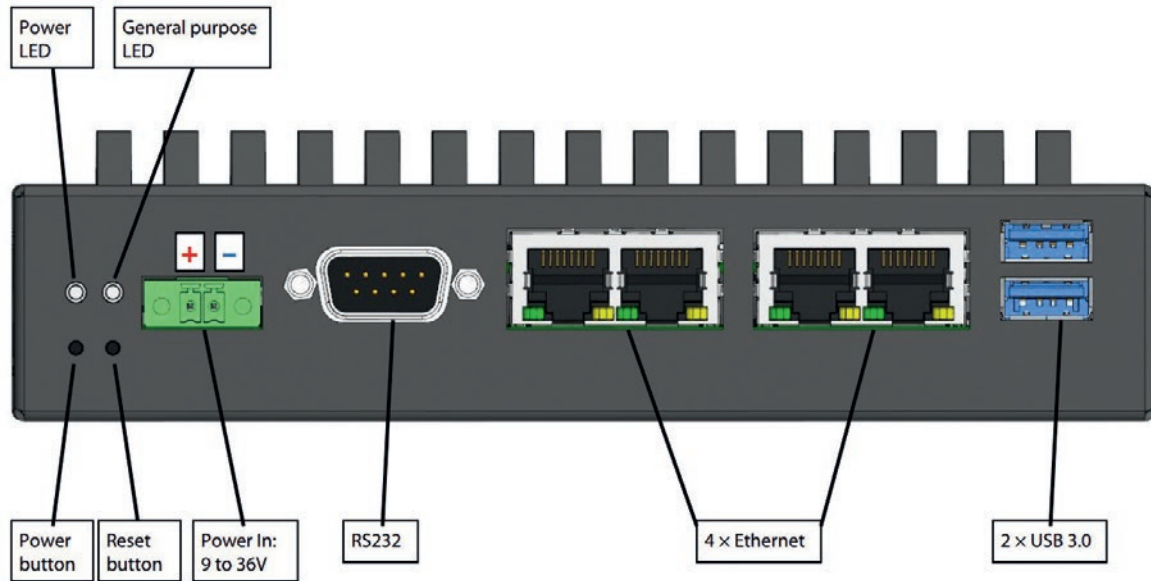
- ▶ Intel Atom® E3900 series (Apollo Lake-I) in Dual- or Quad-Core configuration
- ▶ Up to 8 GB DDR3L
- ▶ 4x Gbit Ethernet (Intel® i210)
- ▶ 2x USB 3.0, 1x RS-232
- ▶ AES-NI-Support, TPM 1.2/2.0 (option)
- ▶ Extended temperature support (option)
- ▶ Ultra compact design
- ▶ Quality Made-in-Germany
- ▶ Individual configurations and ODM branding

### TECHNICAL SPECIFICATION

|  |   |
|--|---|
| <b>CPU</b>                             | Intel Atom® E3900 series („Apollo Lake-I“)<br>E3950: 4x 1.6/2.0 GHz, 2 MB L2-Cache<br>E3940: 4x 1.6/1.8 GHz, 2 MB L2-Cache<br>E3930: 2x 1.3/1.8 GHz, 2 MB L2-Cache                  |
| <b>Memory</b>                          | 2 GB, 4 GB or 8 GB DDR3L  |
| <b>Graphics interfaces</b>             | DisplayPort (DP++) with 4K UHD (on back side)   |
| <b>Interfaces</b>                      | 4x Gbit Ethernet (Intel® i210), (directly connected to CPU, not switched)<br>2x USB 3.0 (with USB 2.0 backward compatibility)<br>1x RS-232 for Console<br>1x USB 2.0 (on back side) |
| <b>Internal extension sockets</b>      | 1x M.2 2242/2280 (key B+M) socket (SATA+USB) (shared with M.2 mass storage socket)  |
| <b>Internal mass storage (options)</b> | 1x M.2 2242/2280 (key B+M) socket (SATA+USB) (8 GB up to 512 GB MLC, SLC/SuperMLC on request)<br>1x eMMC (up to 128 GB MLC)   |
| <b>Security components</b>             | TPM 1.2/2.0 (option)  |
| <b>Power supply</b>                    | Voltage: 9 V – 36 V<br>Connector type (lockable): Phoenix MC1,5/2-G-3,5-LR<br>Power: typ. 3–10 W/max. 15 W<br>Battery: CR2032 (replaceable)   |

|                                     |  |
|-------------------------------------|--|
| <b>Environment</b>                  | Passive cooled (no fan)<br>Standard temperature: 0°C...+60°C<br>Extended temperature: -40°C...+70°C (option)<br>Relative Humidity: 10% to 90% (not condensing)<br>IP20 |
| <b>Form factor/ dimensionsw</b>     | 170 mm x 103 mm x 42 mm  |
| <b>Mounting options</b>             | Desktop, VESA75, DIN rail (with adapter kit)   |
| <b>Operating systems on request</b> | Windows 10 (Standard and Embedded/IoT)<br>Linux (e.g. Ubuntu)<br>Others on request<br>Custom specific software images can be pre-installed.                            |

## IO CONNECTORS MBOX-ADVANCED



## ORDERING INFORMATION

|  |   |
|--|---|
| <b>MBox-ADV-AA</b>                             | Intel Atom® x7-E3950 (4x 1.6/2.0 GHz, 2 MB L2-Cache), 4 GB DDR3L, 32 GB eMMC (MLC), M.2 blank, no TPM, no OS, -20°C...+60°C   |
| <b>Power Supply AC/DC (302195)</b>             | 30W AC/DC wall-mount switching adapter with interchangeable AC plugs (EU, US, AUS, UK). VI = 90...264V, VO=18V, 1,67A, -20...40/60°C, 30W, 1.7m cable with ferrit core/open-ended |
| <b>DC Power Connector</b>                      | 2-pin power connector for easy installation (Phoenix FMC1,5/2-ST-3,5), (already included in MBox-ADV delivery content)  |
| <b>DIN rail mounting bracket (adapter kit)</b> | Can be mounted on bottom side of the chassis.   |
| <b>Adapter for wall mount, rack mount etc.</b> | On request  |

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