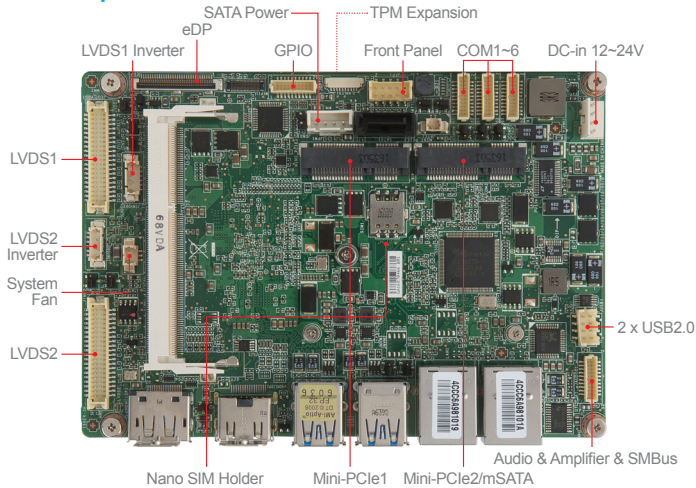


MS-98E6

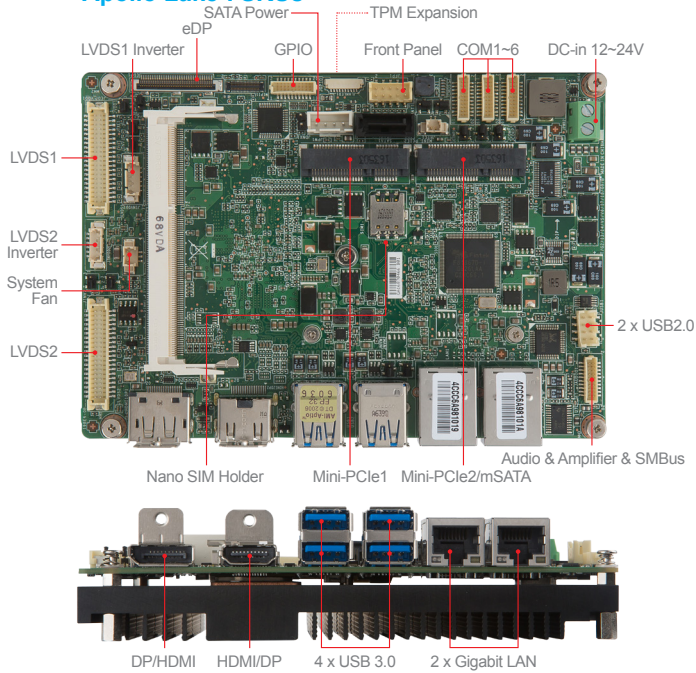
3.5" SBC with Intel® Apollo Lake/Apollo Lake-I for Fanless, Low-Power, High-Performance & Wide Temperature Solution

NEW

Apollo Lake SKUs



Apollo Lake-I SKUs



Specifications

| | | Apollo Lake SKUs | Apollo Lake-I SKUs | |
|--------------------------|-----------------------|--|--|--|
| Processor | CPU | Intel® Pentium® Processor N4200, QC, 6W Intel® Celeron® Processor N3350, DC, 6W | Intel® Atom™ x7 Processor E3950, QC, 12W Intel® Atom™ x5 Processor E3940, QC, 9W Intel® Atom™ x5 Processor E3930, DC, 6W | |
| | Frequency | N4200, 1.1 GHz, up to 2.5 GHz N3350, 1.1 GHz, up to 2.4 GHz | E3950, 1.6 GHz, up to 2.0 GHz E3940, 1.6 GHz, up to 1.8 GHz E3930, 1.3 GHz, up to 1.8 GHz | |
| | L2 Cache | 1M~2M (Depends on CPU) | | |
| | CPU Type | BGA | | |
| | Chipset | Integrated in SoC | | |
| | BIOS | AMI | | |
| Memory | Technology | Single-channel DDR3L 1866/1600 MHz | | |
| | Max. Capacity | Up to 8 GB | | |
| | Socket | 1 x 204-pin SO-DIMM | | |
| | Controller | Intel® HD Graphics | | |
| Display | Graphic Memory | Shared system memory up to 1.7 GB SDRAM | | |
| | LVDS | 2 x Dual Channel 18/24-bit (LVDS1 Share with eDP Signal, LVDS2 Share with DP1 Signal) | | |
| | eDP | 1 (Share with LVDS1 Signal) | | |
| | VGA | N/A | | |
| | DVI | N/A | | |
| | HDMI | 1 (HDMI1 Co-lay DP1/LVDS2 by Optional, HDMI2 Co-lay DP2 by Optional) | | |
| | DisplayPort | 1 (DP1 Co-lay HDMI1/LVDS2 by Optional, DP2 Co-lay HDMI2 by Optional) | | |
| | Multiple Display | 3 independent displays | | |
| | Display Interface | LVDS1 up to 1920x1200 @ 60 Hz, LVDS2 up to 1920x1200 @ 60 Hz, eDP up to 4096x2160 @ 60 Hz, HDMI1/HDMI2 up to 3840x2160 @ 30 Hz DP1/DP2 up to 4096x2160 @ 60 Hz | | |
| | | | | |
| Ethernet | Controller | Intel I211-AT GbE LAN Intel I210-IT GbE LAN | | |
| Audio | Controller | Realtek® ALC887-VD2-CG HD Audio Codec | | |
| Super I/O | Controller | Fintek F81867AD-I | | |
| | Watchdog Timer | 256-level Watchdog Timer | | |
| H/W Monitor | Smart Fan | Yes | | |
| | TPM | Controller | Pin header | |
| I/O Interface | USB | 4 x USB 3.0 (4 x Rear) 2 x USB 2.0 (2 x Internal) | | |
| | | Serial | 6 x COM (Internal) COM1: RS-232/422/485, 0V/5V/12V, support auto flow control COM2~6: RS-232, 0V/5V/12V (RS-422/485 by Optional) | |
| | Parallel | N/A | | |
| | PS/2 | N/A | | |
| | GPIO | 16-bits (8 x GPI; 8 x GPO) | | |
| | Expansion Slot | PCIe x16 | N/A | |
| | | PCI | N/A | |
| | | Mini-PCIe | 2 x Full-size (Mini-PCIe1 Slot w/ NANO SIM-Holder) (Mini-PCIe2 Slot w/ mSATA) | |
| | Storage | SATA | 1 x SATA 3.0 | |
| | | mSATA | 1 (Shared with Mini-PCIe2) | |
| Power Supply | DC | DC-in 12~24V | | |
| | ATX | N/A | | |
| Environment | Operating Temperature | -10 ~ 60°C | -40 ~ 85°C | |
| | Operating Humidity | 10 ~ 90%, non-condensing | | |
| | Storage Temperature | -20 ~ 80°C | -40 ~ 85°C | |
| | Storage Humidity | 10 ~ 90%, non-condensing | | |
| Form Factor | Dimensions | 146mm x 102mm (3.5") | | |
| | Weight | 0.34 kg | 0.59 kg | |
| Certification | EMC | FCC, CE, RCM, VCCI, BSMI | | |
| Software Platform | OS Support | Windows 10 (64-bit) Fedora 25 Ubuntu 16.04 | | |
| | | | | |

Features

- Intel® Apollo Lake/Apollo Lake-I Series SoC
- Supports DDR3L 1866/1600 MHz SO-DIMM memory up to 8GB
- 3 independent displays with HDMI, DP, eDP, and LVDS outputs
- 4 USB 3.0, 2 USB 2.0, and 6 COM ports
- Dual Mini-PCIe, SATA3.0, mSATA, NANO SIM-Holder, and Dual GbE LAN
- Apollo Lake-I Series support operating temperature : -40 ~ 85°C
- Supports DC-in 12~24V

Ordering Information

| Part Number | Description |
|-------------|-------------|
| Coming soon | |

Packing List

| Part Number | Description |
|-------------|-------------|
| Coming soon | |