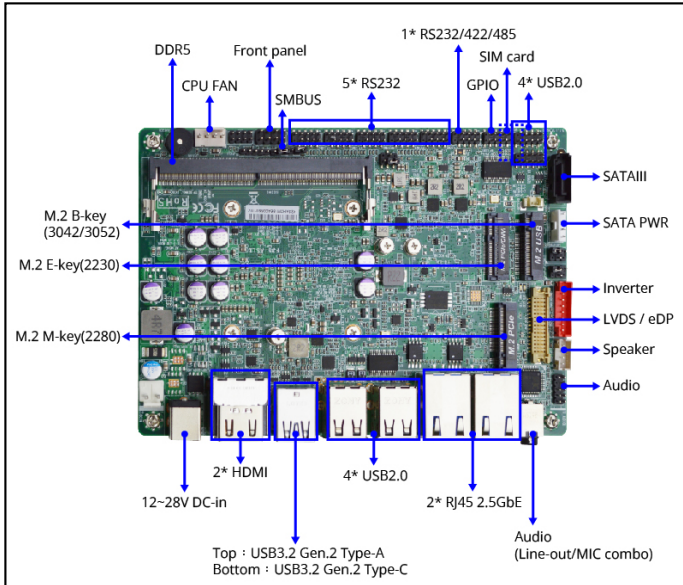


3.5" SubCompact Board with Intel® Atom Processor Soc, Wide Range DC-in Support (12-28V)



Features

- **Powered by Intel® Atom X-series Processor(Formerly Amston Lake, TDP 9W)**
- **High-Performance Memory: 1 x DDR5 4800MHz S0-DIMM, up to 32GB**
- **Triple Display support: 2 x 4K HDMI, 1 x 4K UCB Type-C DP, and 1 x LVDS/eDP output**
- **Dual 2.5GE LAN for high-speed networking**
- **Flexible storage option: 1 x SATA III, 1 x M.2 M-key**
- **Comprehensive I/O: 1 x USB 3.2 Gen 2, 1 x USB Type-C (ALT), 8 x USB 2.0, 6 x COM**
- **Advanced Power Protection: Supports RVP, OCP, and OVP**
- **Wide Power Input: DC-in 12-28V for greater power flexibility**

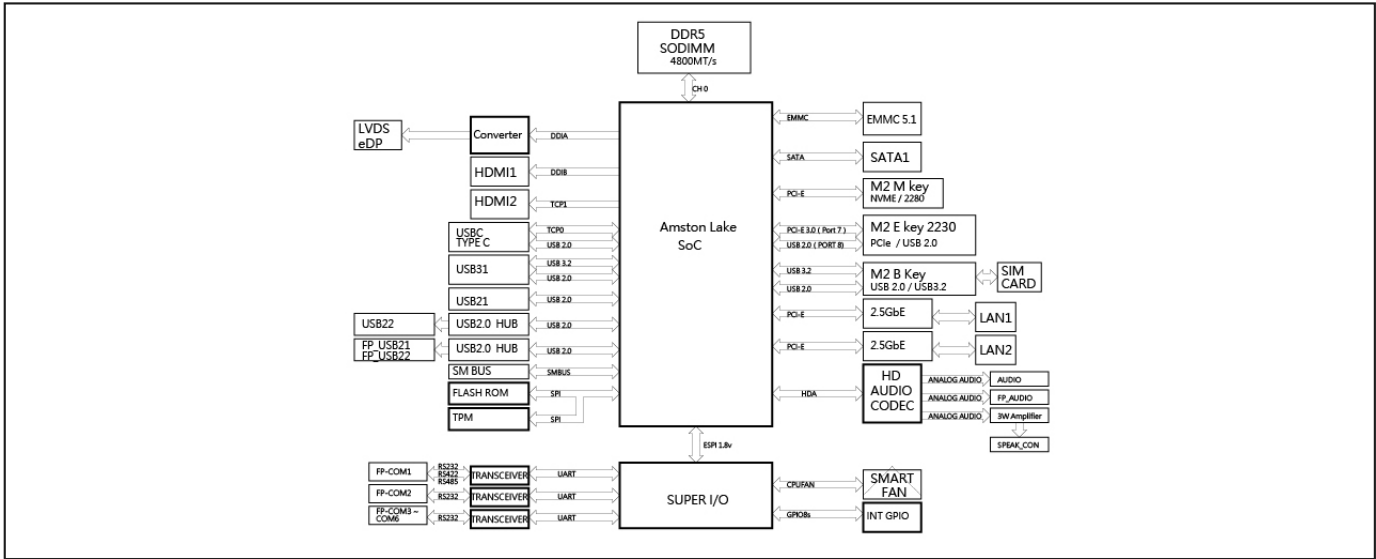
Packing List

| PART NUMBER | DESCRIPTION | QTY |
|--------------------|---|-----|
| F35-ASL1 | F35-ASL1 MB | 1 |
| HCS3XXMHT03S-5F | Flat type Heatsink (assembled) | 1 |
| HCS376MHT01S-F | CPU plate (assembled) | 1 |
| G01-SATA3-BL-1F | SATA cable, 50cm | 1 |
| G01-PW4PS2S-322-1F | SATA Power Y cable, 5.0pitch for 32cm, 2.54pitch for 20cm | 1 |
| G01-COM-H2M22-1F | COM Port Cable, 22cm, Pitch 2.0 | 2 |

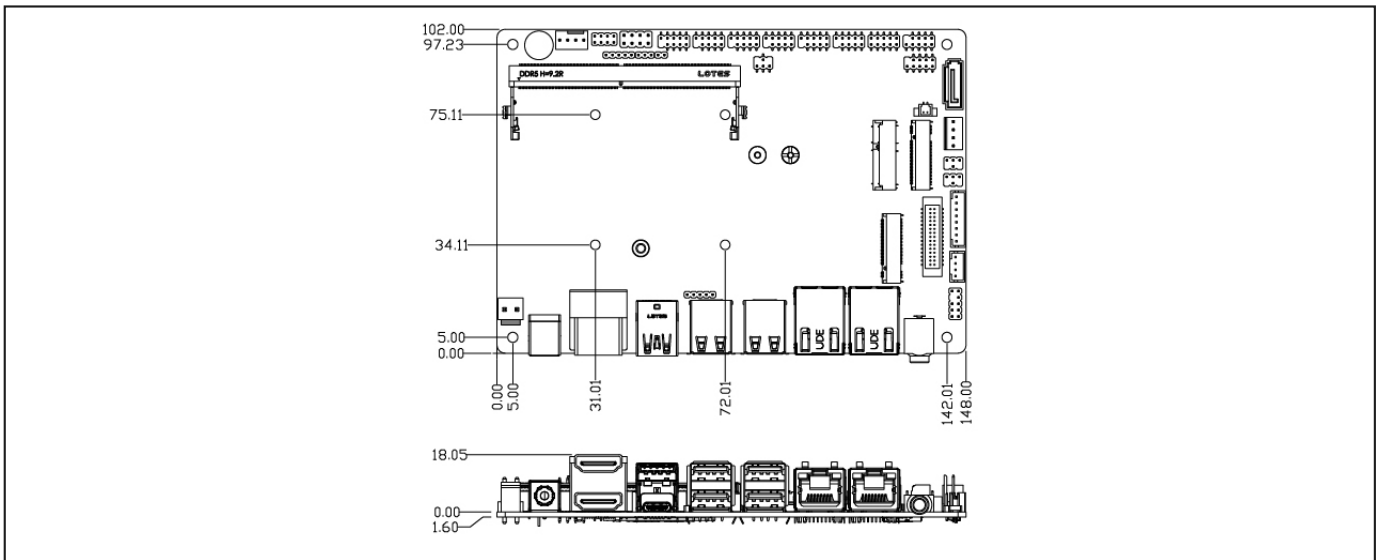
Specifications

| SYSTEM | |
|-----------------------------|---|
| MB FORM FACTOR | 3.5" |
| CPU | Onboard Intel Atom® x7433RE Processor (Formerly Amston Lake, TDP 9W) For additional compatible CPUs, please contact regional sales |
| CHIPSET | Intel® SoC |
| MEMORY | 1 x DDR5 4800MHz, Single Channel S0-DIMM, up to 32GB |
| BIOS | UEFI |
| WAKE ON LAN | Yes |
| WATCHDOG TIMER | 255 Levels |
| SECURITY | TPM2.0 (dTPM, Optional) |
| RTC BATTERY | Lithium Battery |
| DIMENSION (W X D) | 148.0 (W) x 102.0 (D) mm (5.8" x 4.0") |
| OS SUPPORT | Windows® 11 (64bit) Windows® 10 (64bit) Linux |
| POWER | |
| POWER REQUIREMENT | DC-in 12-28V |
| POWER ON MODE | AT / ATX (Default) Mode |
| CONNECTOR | Internal 2-pin Header |
| DISPLAY | |
| GPU | Intel® UHD Graphics |
| LVDS | 1 x 24-bit Dual Channel LVDS (Max. Resolution: 1920 x 1080 @60Hz / Co-Lay eDP) |
| eDP | 1 x INT (co-lay with LVDS) |
| Type C DP | 1 x Type C DP1.4a (Max Resolution: 4096 x 2304@60Hz) |
| HDMI | 1 x HDMI 2.0b (Max Resolution: 4096 x 2160@60Hz), 1 x HDMI 1.4 (Max Resolution: 4096 x 2160@30Hz) |
| MULTIPLE DISPLAY | Support 3 Displays |
| AUDIO | |
| CODEC | Realtek Audio Codec |
| COMBO | 1 x Combo Audio Jack for Line-Out / Mic-In |
| AMPLIFIER | 3W |
| LAN | |
| ETHERNET | 2 x RJ45 for Intel® I226-V 2.5GbE |
| USB PORT | |
| USB | Internal Header for 4 x USB 2.0 4 x USB 2.0 1 x USB 3.2 Gen 2x1 Type-C (10Gbps) Support DP ALT Mode 1 x USB 3.2 Gen 2x1 (10Gbps, Formerly USB 3.1 Gen 2) |
| SERIAL PORT | |
| COM | Internal Header for 1 x RS-232/422/485 Internal Header for 5 x RS-232 |
| INTERNAL I/O | |
| GPIO | 8-Bit |
| SMBUS | Yes |
| FAN | 1 x 4-pin Connector for System Fan (PWM Mode) |
| FRONT PANEL | HDD Active LED Power LED Power On/Off Reset |
| STORAGE | |
| ADDITIONAL | 1 x Chassis intrusion 1 x AT/ATX Mode Selection |
| SATA | 1 x SATA III 1 x SATA Power Connector |
| eMMC | Onboard 64GB eMMC 5.1 (optional) |
| EXPANSION | |
| M.2 | 1 x B-Key 3042/3052 (USB 3.2/USB 2.0) for 4G/5G Module 1 x E-Key 2230 (USB 2.0/PCIe 3.0 x1) 1 x M-Key 2280 (PCIe 3.0 x2) Support NVMe |
| SIM | 1 x Nano SIM Card Slot |
| ENVIRONMENT & CERTIFICATION | |
| SHOCK | 15G, 11ms duration |
| VIBRATION | 1 Grms/ 5- 500Hz/ Operation |
| OPERATING TEMPERATURE | -20°C - 60°C (-4°F - 140°F) |
| STORAGE TEMPERATURE | -20°C - 85°C (-4°F - 185°F) |
| OPERATING HUMIDITY | 10 - 90% relative humidity, non-condensing |
| CERTIFICATION | CE/FCC Class A |

Block Diagram



Dimension Unit: mm



Ordering Information

| PART NUMBER | F35-ASL1-74330010 | F35-ASL1-74330210 | F35-ASL1-74330810 |
|-----------------------|--------------------------------|--------------------------------|--------------------------------|
| CPU | Intel® Atom® x7433RE Processor | Intel® Atom® x7433RE Processor | Intel® Atom® x7433RE Processor |
| SECURITY | Intel® PTI (TPM) | TPM2.0 (dTPM) | TPM2.0 (dTPM) |
| POWER REQUIREMENT | DC-in 12-28V | DC-in 12-28V | DC-in 12-28V |
| GPU | Intel® UHD Graphics | Intel® UHD Graphics | Intel® UHD Graphics |
| LVDS | 1 x LVDS/eDP | 1 x LVDS/eDP | 1 x LVDS/eDP |
| eDP | 1 x eDP/LVDS | 1 x eDP/LVDS | 1 x eDP/LVDS |
| TPYE C DP | 1 x Type C DP | 1 x Type C DP | 1 x Type C DP |
| HDMI | 2 x HDMI | 2 x HDMI | 2 x HDMI |
| MULTIPLE DISPLAY | Support 3 Displays | Support 3 Displays | Support 3 Displays |
| ETHERNET | 2 x 2.5GbE | 2 x 2.5GbE | 2 x 2.5GbE |
| USB | 4 x USB 2.0 | 4 x USB 2.0 | 4 x USB 2.0 |
| USB | 1 x USB 3.2 Gen 2 Type C | 1 x USB 3.2 Gen 2 Type C | 1 x USB 3.2 Gen 2 Type C |
| USB | 1 x USB 3.2 Gen 2 | 1 x USB 3.2 Gen 2 | 1 x USB 3.2 Gen 2 |
| COM | 1 x RS-232/422/485 | 1 x RS-232/422/485 | 1 x RS-232/422/485 |
| COM | 5 x RS-232 | 5 x RS-232 | 5 x RS-232 |
| SATA | 1 x SATA III | 1 x SATA III | 1 x SATA III |
| eMMC | | | eMMC 64GB |
| M.2 | 1 x B-Key 3042/3052 | 1 x B-Key 3042/3052 | 1 x B-Key 3042/3052 |
| M.2 | 1 x E-Key 2230 | 1 x E-Key 2230 | 1 x E-Key 2230 |
| M.2 | 1 x M-Key 2280 | 1 x M-Key 2280 | 1 x M-Key 2280 |
| SIM | 1 x Nano SIM Card Slot | 1 x Nano SIM Card Slot | 1 x Nano SIM Card Slot |
| OPERATING TEMPERATURE | -20°C - 60°C (-4°F - 140°F) | -20°C - 60°C (-4°F - 140°F) | -20°C - 60°C (-4°F - 140°F) |