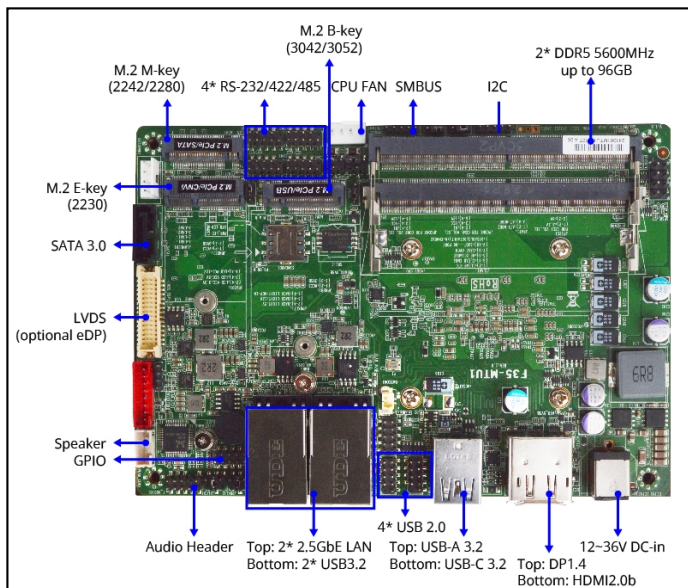


# F35-MTU1-125U0011



3.5"

3.5" SubCompact Board with Core™ Ultra 5 125U



## Features

- Powered by Intel® Core™ Ultra SoC Processor (Meteor Lake): With integrated NPU for AI acceleration.
- High-Performance Memory: 2x DDR5 5600MHz SO-DIMM, up to 96GB.
- Dual Intel® 2.5GbE LAN: Supports TSN, Redundancy, and High-speed connectivity
- Versatile 4-Display Support: 3x 4K outputs (DP Type-C, DP, HDMI) and 1x LVDS for flexible configurations
- Storage and Expansion: 1x SATA III, 1x M.2 E-Key, 1x M.2 M-Key, 1x M.2 B-Key, and 1x Nano SIM slot.
- Comprehensive I/O: 1x USB 3.2 Gen2x2, 3x USB 3.2 Gen 2, 4x USB 2.0, and 4x COM ports.
- Wide-Range DC Input: 12–36V for industrial applications.

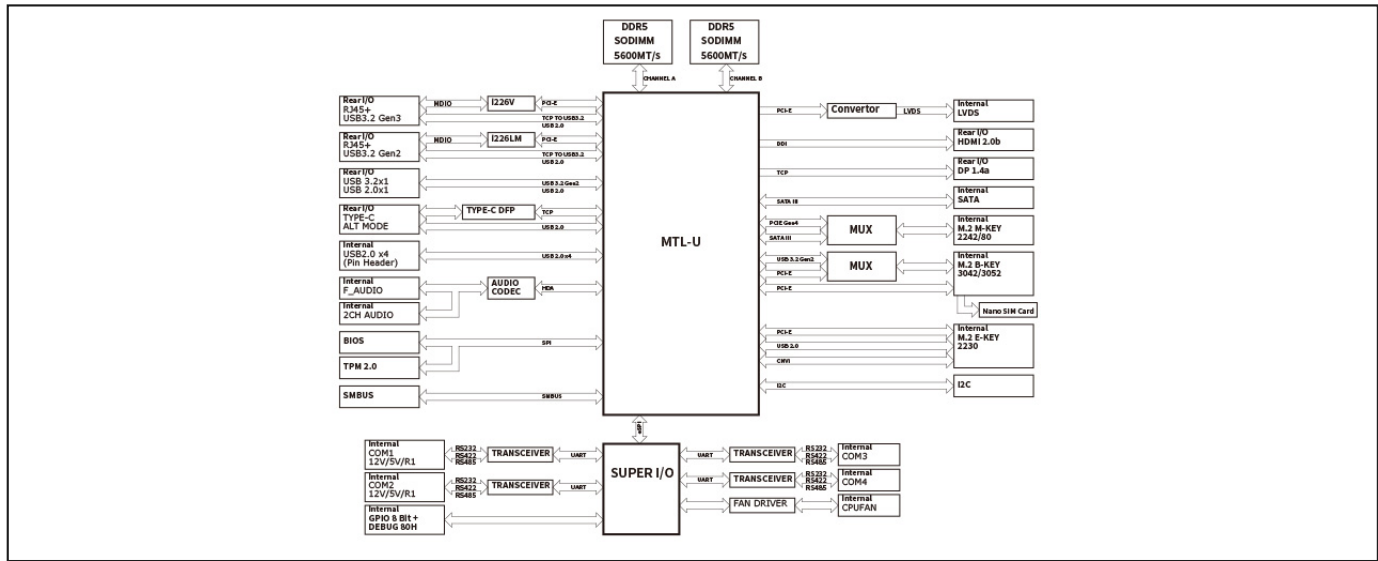
## Packing List

| PART NUMBER        | DESCRIPTION          | QTY |
|--------------------|----------------------|-----|
| F35-MTU1           | F35-MTU1             | 1   |
| G01-COM-H2M20-1F   | COM cable            | 2   |
| G01-SATA3-BL-1F    | SATA cable           | 1   |
| G01-PW4PS2S-322-1F | SATA Power cable     | 1   |
| F05-JF35-04-F      | Heat sink(assembled) | 1   |
| F07-FN606010-F     | FAN(assembled)       | 1   |

## Specifications

| SYSTEM                      |                                                                                                                                                             |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MB FORM FACTOR              | 3.5"                                                                                                                                                        |
| CPU                         | Onboard Intel® Core™ Ultra 5 Processor 125U (Formerly Meteor Lake, TDP 15W)                                                                                 |
| CHIPSET                     | Intel® SoC                                                                                                                                                  |
| MEMORY                      | 2 x DDR5 5600MHz, Dual Channel SO-DIMM, up to 96GB                                                                                                          |
| BIOS                        | UEFI                                                                                                                                                        |
| WAKE ON LAN                 | Yes                                                                                                                                                         |
| WATCHDOG TIMER              | 255 Levels                                                                                                                                                  |
| SECURITY                    | Intel® PTT (TPM)                                                                                                                                            |
| 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)<br>Windows® 10 (64bit)<br>Linux                                                                                                         |
| POWER                       |                                                                                                                                                             |
| POWER REQUIREMENT           | DC-in 12-36V                                                                                                                                                |
| POWER ON MODE               | AT / ATX (Default) Mode                                                                                                                                     |
| CONNECTOR                   | DC Jack                                                                                                                                                     |
| DISPLAY                     |                                                                                                                                                             |
| GPU                         | Intel® Graphics                                                                                                                                             |
| LVDS                        | 1 x 24-bit Dual Channel LVDS (Max. Resolution: 1920 x 1200 @60Hz, Co-lay eDP)                                                                               |
| Type-C DP                   | 1 x Type-C DP1.4 (Max Resolution: 4096 x 2160@60Hz)                                                                                                         |
| DP                          | 1 x DP1.4 (Max Resolution: 4096 x 2160@60Hz)                                                                                                                |
| HDMI                        | 1 x HDMI 2.0b (Max Resolution: 4096 x 2160@60Hz)                                                                                                            |
| MULTIPLE DISPLAY            | Support 4 Displays                                                                                                                                          |
| AUDIO                       |                                                                                                                                                             |
| CODEC                       | Realtek Audio Codec                                                                                                                                         |
| COMBO                       | 1 x Internal Header                                                                                                                                         |
| AMPLIFIER                   | 3W                                                                                                                                                          |
| LAN                         |                                                                                                                                                             |
| ETHERNET                    | 1 x RJ45 for Intel® I226-V 2.5GbE<br>1 x RJ45 for Intel® I226-LM 2.5GbE                                                                                     |
| USB PORT                    |                                                                                                                                                             |
| USB                         | 1 x USB 3.2 Gen 2x2 Type-C (20Gbps)<br>3 x USB 3.2 Gen 2x1 (10Gbps, Formerly USB 3.1 Gen 2)<br>Internal Header for 4 x USB 2.0                              |
| SERIAL PORT                 |                                                                                                                                                             |
| COM                         | Internal Header for 4 x RS-232/422/485                                                                                                                      |
| INTERNAL I/O                |                                                                                                                                                             |
| GPIO                        | 8-Bit                                                                                                                                                       |
| SMBUS                       | Yes                                                                                                                                                         |
| I2C                         | Yes                                                                                                                                                         |
| FAN                         | 1 x 4-pin Connector for CPU Fan (PWM Mode)                                                                                                                  |
| FRONT PANEL                 | HDD Active LED<br>Power LED<br>Power On/Off<br>Reset                                                                                                        |
| ADDITIONAL                  | 1 x Chassis intrusion<br>1 x AT/ATX Mode Selection                                                                                                          |
| STORAGE                     |                                                                                                                                                             |
| SATA                        | 1 x SATA III<br>1 x SATA Power Connector                                                                                                                    |
| RAID                        | RAID 0/1                                                                                                                                                    |
| EXPANSION                   |                                                                                                                                                             |
| M.2                         | 1 x E-Key 2230 (USB 2.0/PCIe 3.0 x1) Support CNVi<br>1 x B-Key 3042/3052 (USB 3.2/PCIe 3.0 x2)<br>1 x M-Key 2242/2280 (PCIe 4.0 x4 / SATA III) Support NVMe |
| SIM                         | 1 x Nano SIM Card Slot                                                                                                                                      |
| ENVIRONMENT & CERTIFICATION |                                                                                                                                                             |
| 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**

