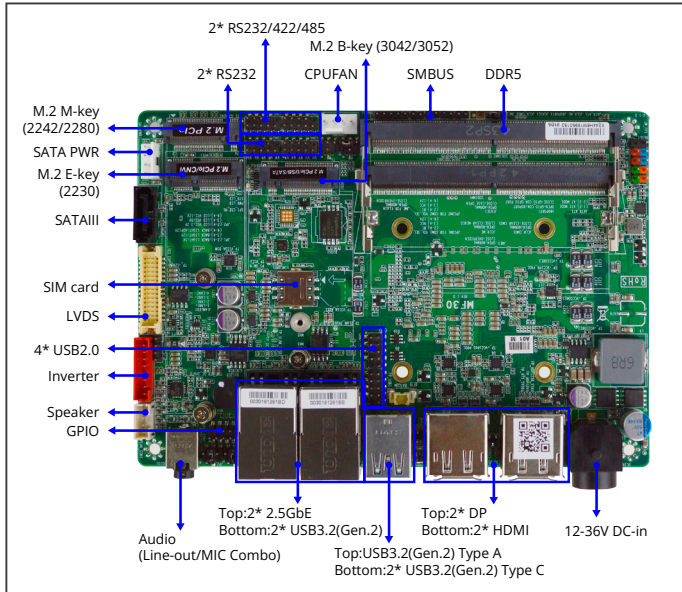


MF30

3.5" SubCompact Board with 13th Generation Intel® Core™ i7/i5/i3 Processor SoC



Specifications

SYSTEM	
FORM FACTOR	3.5" SubCompact Board
CPU	Onboard Intel® 13th Generation Intel® Core™ /U-series Processor SoC (formerly Raptor Lake U) Intel® Core™ i5-1335U *For additional compatible CPUs, please contact regional sales
CPU TDP	15W
CHIPSET	Integrated with Intel® SoC
MEMORY TYPE	2 x DDR5 4800MHz, Dual Channel SODIMM, up to 64GB
BIOS	UEFI
WAKE ON LAN	Yes
WATCHDOG TIMER	255 Levels
SECURITY	TPM2.0 (optional)
RTC BATTERY	Lithium Battery
DIMENSION (L X W)	148mm x 102mm (5.75" x 4")
OS SUPPORT	Windows® 10 (64bit), Windows® 11 (64bit) Linux
POWER	
POWER REQUIREMENT	DC 12~36V
POWER SUPPLY TYPE	AT/ATX
CONNECTOR	DC-in jack
DISPLAY	
CONTROLLER	Intel® Iris X ^e Graphics
LVDS/eDP/MIPI-DSI	1 x LVDS, up to 1920 x 1200 60Hz, co-layer eDP
DISPLAY INTERFACE	2 x HDMI 2.0b, up to 4K x 2K 60Hz 2 x DP1.4, up to 4K x 2K 60Hz 1 x Type C DP1.4, up to 4K x 2K 60Hz
MULTIPLE DISPLAY	Support 4 Displays
AUDIO	
CODEC	Realtek ALC897
AUDIO INTERFACE	1 x external Line-out/MIC Combo
Speaker	1 x internal speaker
EXTERNAL I/O	
ETHERNET	1 x Intel® i226V, 10/100/2500Base 1 x Intel® i226LM, 10/100/2500Base
USB	3 x USB 3.2 Gen 2 1 x USB 3.2 Gen 2 Type C support DP ALT mode
SERIAL PORT	—
VIDEO	2 x HDMI 2.0b 2 x DP1.4 1 x Type C (ALT mode)
INTERNAL I/O	
USB	4 x USB 2.0
SERIAL PORT	2 x RS232/422/485 (COM1/COM2) 2 x RS232 (COM3/COM4)
GPIO	8-Bit
SMBUS	Yes
FAN	1 x CPU Fan
SIM	1 x Nano SIM
FRONT PANEL	HDD LED PWR LED Power Button Reset
OTHERS	1 x Chassis intrusion 1 x AT mode
STORAGE	
SATA	1 x SATA3 1 x SATA Power Connector
M.2	1 x M-Key 2242/2280 (PCIe 4.0 x4) support NVMe
EXPANSION	
M.2	1 x E-key 2230 (USB2.0/PCIe 3.0x1) support CNVi 1 x B-key 3042/3052 (USB 3.2/USB3.0) for 4G/5G/LTE OR 1 x B+M-key 2242 (SATA/PCIe 3x1) for SSD
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	Meet CE/FCC Class A

Features

- 2 x DDR5 SODIMM Slot, up to 64GB
- 2 x 2.5GbE
- 1 x SATA3, 1 x M.2 M-key (2242/2280)
- 1 x M.2 E-key(2230), 1 x M.2 B-key(3042/3052)
- 3 x USB 3.2 Gen2, 4 x USB 2.0, 1 x USB Type C
- 2 x RS232/422/485, 2 x RS232
- 2 x HDMI, 2 x DP, 1 x Type C DP, 1 x LVDS
- DC Input 12~36V

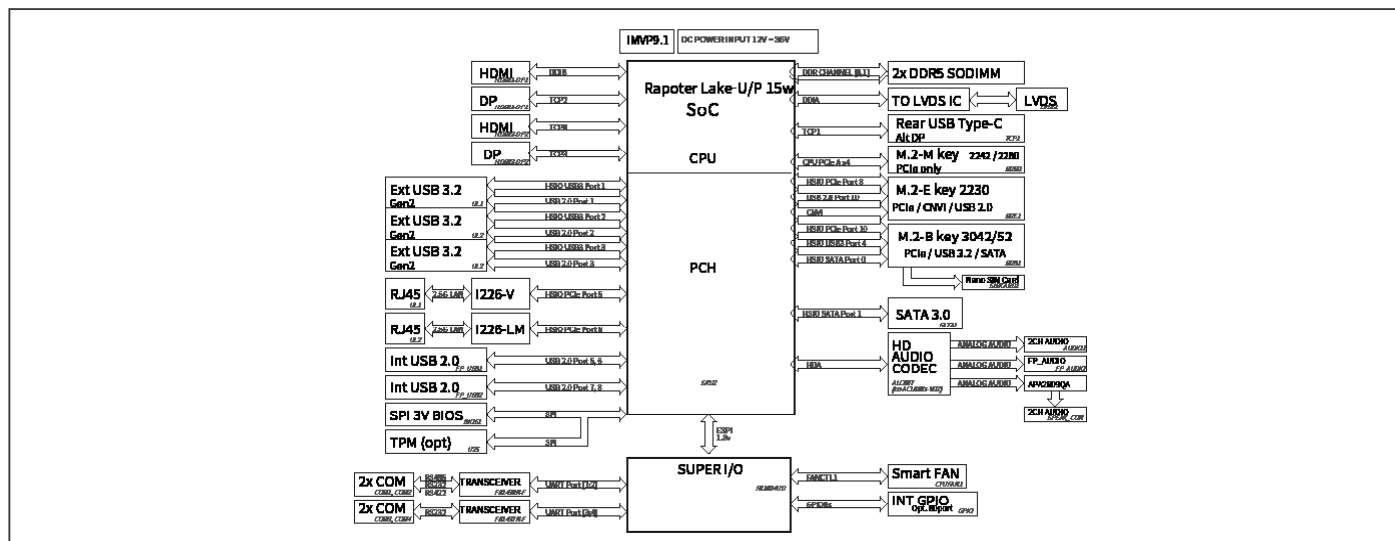
Applications

- Multiple Display Application

Packing List

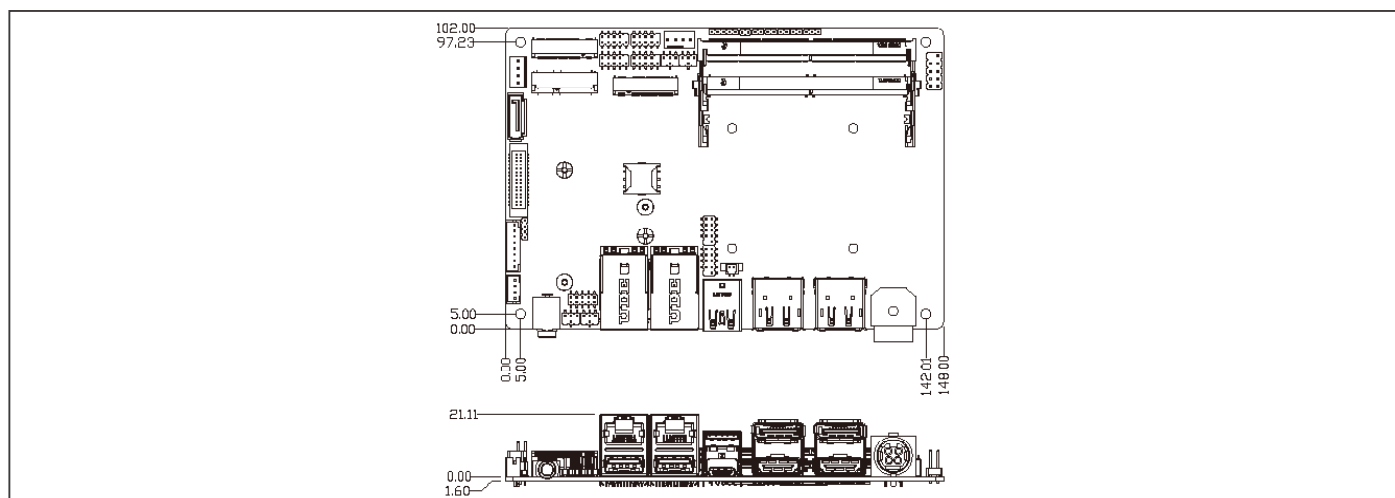
Part Number	Description	QTY per Board
	MF30 MB	1
HCS3XXMHT02S-F HCS3XXMHT03S-1F	Flat type Heatsink (assembled)	1
G01-COM-H2M22-1F	COM Port Cable, 22cm, Pitch 2.0	2
G01-PW4PS-2S-323F	SATA Power Y cable, 5.0pitch for 32cm, 2.54pitch for 20cm	1
G01-SATA3-BL-1F	SATA cable, 50cm	1

Block Diagram



Dimension

Unit: mm



Ordering Information

Part Number	MF30-13350	MF30-13352	MF30-133E0	MF30-133E2
CPU	Intel® Core™ i5-1335U	Intel® Core™ i5-1335U	Intel® Core™ i5-1335UE	Intel® Core™ i5-1335UE
DISPLAY	2 x HDMI 2 x DP 1 x TypeC DP 1 x LVDS	2 x HDMI 2 x DP 1 x TypeC DP 1 x LVDS	2 x HDMI 2 x DP 1 x TypeC DP 1 x LVDS	2 x HDMI 2 x DP 1 x TypeC DP 1 x LVDS
LAN	2 x 2.5GbE	2 x 2.5GbE	2 x 2.5GbE	2 x 2.5GbE
USB	3 x USB 3.2 Gen 2 1 x USB 3.2 Gen2 Type C 4 x USB 2.0	3 x USB 3.2 Gen 2 1 x USB 3.2 Gen2 Type C 4 x USB 2.0	3 x USB 3.2 Gen 2 1 x USB 3.2 Gen2 Type C 4 x USB 2.0	3 x USB 3.2 Gen 2 1 x USB 3.2 Gen2 Type C 4 x USB 2.0
RS-232	2	2	2	2
RS-232/422/485	2	2	2	2
STORAGE	1 x SATAIII 1 x M.2 M-key 2242/2280	1 x SATAIII 1 x M.2 M-key 2242/2280	1 x SATAIII 1 x M.2 M-key 2242/2280	1 x SATAIII 1 x M.2 M-key 2242/2280
EXPANSION SLOT	1 x M.2 E-key 2230 1 x M.2 B-key 3042/3052	1 x M.2 E-key 2230 1 x M.2 B-key 3042/3052	1 x M.2 E-key 2230 1 x M.2 B-key 3042/3052	1 x M.2 E-key 2230 1 x M.2 B-key 3042/3052
TPM	—	TPM2.0	—	TPM2.0
POWER	12-36V	12-36V	12-36V	12-36V
OPERATING TEMP	-20°C ~ 60°C	-20°C ~ 60°C	-20°C ~ 60°C	-20°C ~ 60°C