

KEY FEATURES

- Intel® Core™ Ultra Series 3 Processors (Panther Lake-H)
- 2 x 262-pin SO-DIMM DDR5 7200/6400 MHz, up to 128GB (64GB per DIMM), supports In-Band ECC
- 1 x USB 3.2 Gen2x2, 2 x USB 3.2 Gen2, 6 x USB 2.0, 1 x M.2 Key E, 2 x M.2 Key M, 3 x COM
- 2 x Intel 2.5 Gigabit LAN
- Supports Quad display, 2 x HDMI 2.1, 1 x DP 1.4a (1 from Type-C), 1 x LVDS or eDP, 1 x eDP 1.5
- Supports VMD RAID 0/1
- 12~36V DC-In PWR/ Supports Type-C PD 100W

SPECIFICATIONS

Form Factor

Dimensions	3.5" SBC (5.8-in x 4-in x 0.94-in, 14.7 cm x 10.2 cm x 2.40 cm)
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Processor System

CPU	Intel® Core™ Ultra Series 3 Processors (Panther Lake-H) SBC-377P (Ultra X7 358H, 4P+8E+4LPE) SBC-377E (Ultra 5 325, 4P+4LPE) *All CPU SKUs can support In-Band ECC.
BIOS	AMI SPI 256 Mbit

Memory

Technology	Dual Channel DDR5 7200 MHz (Ultra X7 358H) Dual Channel DDR5 6400 MHz (Ultra 5 325)
Capacity	128GB (64GB per DIMM)
Socket	2 x 262-pin SO-DIMM

Graphics

Controller	Intel® Graphics
HDMI	HDMI 2.1 Max resolution up to 7680x4320@60Hz
LVDS	Dual channel 24 bit up to 1920x1200@60Hz (Connector shared with eDP)
eDP	eDP 1.5 Max resolution up to 4096x2160@60Hz Max resolution up to 1920x1080@60Hz (one eDP single connector shared with LVDS)
MultiDisplay	Quad display (Included 1 output from Type-C)

Expansion Slot

M.2	1 x M.2 (Key E, 2230) with PCIe Gen4 x1, USB 2.0 and CNVi for Wireless
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Audio

Interface	Realtek ALC256 HD, High Definition Audio
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Ethernet

Controller/ Speed	LAN1: Intel® I226LM with 10/100/1000/2500 Mbps LAN2: Intel® I226V with 10/100/1000/2500 Mbps
Connector	2 x RJ-45

Rear I/O

HDMI	2 x HDMI 2.1
Ethernet	2 x 2.5 Gigabit LAN
USB	2 x USB 2.0 2 x USB 3.2 Gen2 1 x USB 3.2 Gen2x2 (Type-C, 5V/3A, support DP 1.4a display output)

Internal Connector

USB	4 x USB 2.0 (2 x 2.00mm pitch header)
COM	COM3, COM4, COM5 (RS-232/422/485)
GPIO	4 x GPI, 4 x GPO
LVDS	1 (Connector with LVDS/eDP signal, switch by BIOS)
eDP	1
Speaker Header	1

Storage

M.2	1 x M.2 (Key M, 2242/2280) with PCIe Gen5 x4 for SSD 1 x M.2 (Key M, 2242/3052) with PCIe Gen4 x4 and USB 2.0 for SSD
RAID	Intel® VMD RAID 0/1 **supported by PCIe interface PCIe interface: 2* M.2 Key M

Security

TPM	TPM 2.0 onboard IC (Optional) Intel® PTT
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Watchdog Timer

Output	From Super I/O to drag RESETCON#
Interval	256 Segments, 0, 1, 2, ..., 255sec

Power Requirements

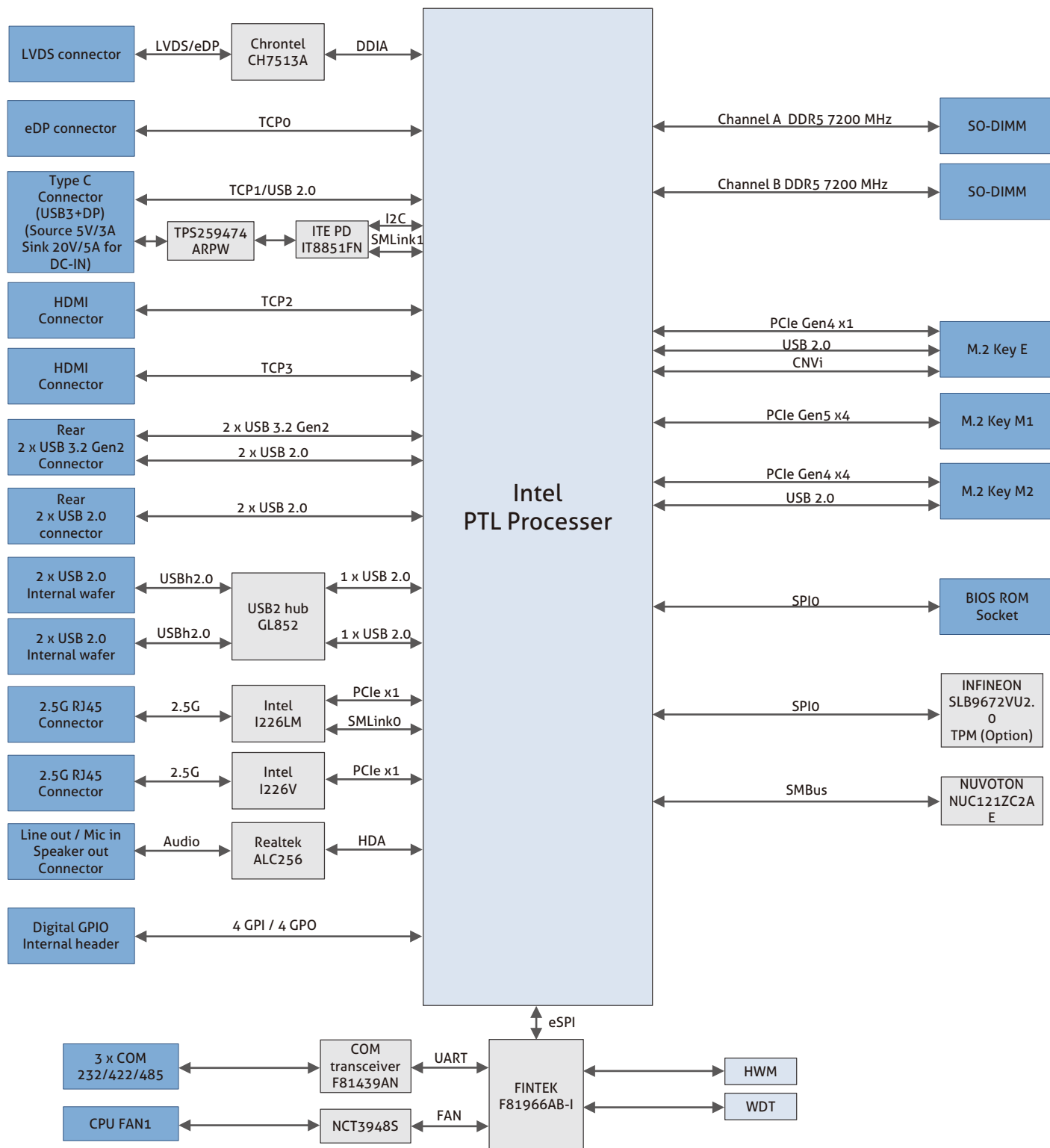
Input PWR	12~36V DC-In with 4-pin wafer PWR cable 12V DC-In only (BOM option) 20V/5A, 100W USB Type-C PD (Power Delivery)
Power On	AT/ATX Supported - AT : Directly PWR on as power input ready - ATX : Press button to PWR on after power input ready

Environment

Operating Temp	-20 °C ~ 70 °C
Storage Temp	-40 °C ~ 85 °C
Operating Humidity	5% ~ 90% (non-condensing)
Storage Humidity	5% ~ 90% (non-condensing)

BLOCK DIAGRAM

SBC-377



ORDERING INFORMATION

Ordering Information

Model	SBC-377P	SBC-377E
CPU	Ultra X7 358H	Ultra 5 325
HDMI	2	2
DP	1	1
LVDS/eDP	1 / 1	1 / 1
2.5 Gbe LAN	2	2
COM	3	3
USB Type-C	1	1
USB 3.2	2	2
USB 2.0	6	6
M.2 E-Key	1	1
M.2 M-Key	2	2
TPM	FW TPM	FW TPM

Packing List (Gift)

Description	Quantity	Quantity
Heat Spreader	1	1
COM Cable	2	2
DC-in Cable	1	1
SCREW M3*2.5	3	3
2.00mm MINI JUMPER	1	1

Packing List (Bulk)

Description	Quantity	Quantity
SCREW M3*2.5	3	3
2.00mm MINI JUMPER	1	1

I/O View

