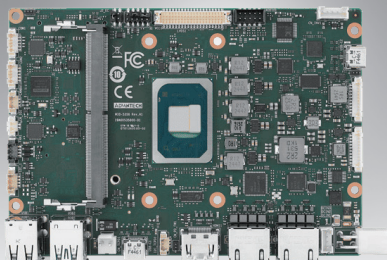


MIO-5356

Intel® Core™ Series 3 Processors

Preliminary



Features

- Dual Channel DDR5-6400 up to 64GB
- Optional MIOe-TCPD module supports USB-C PD 100W
- 3 simultaneous displays: HDMI + USB Type-C + LVDS
- Support EdgeBMC for OOB(Out-of-Band) remote control

Software APIs:





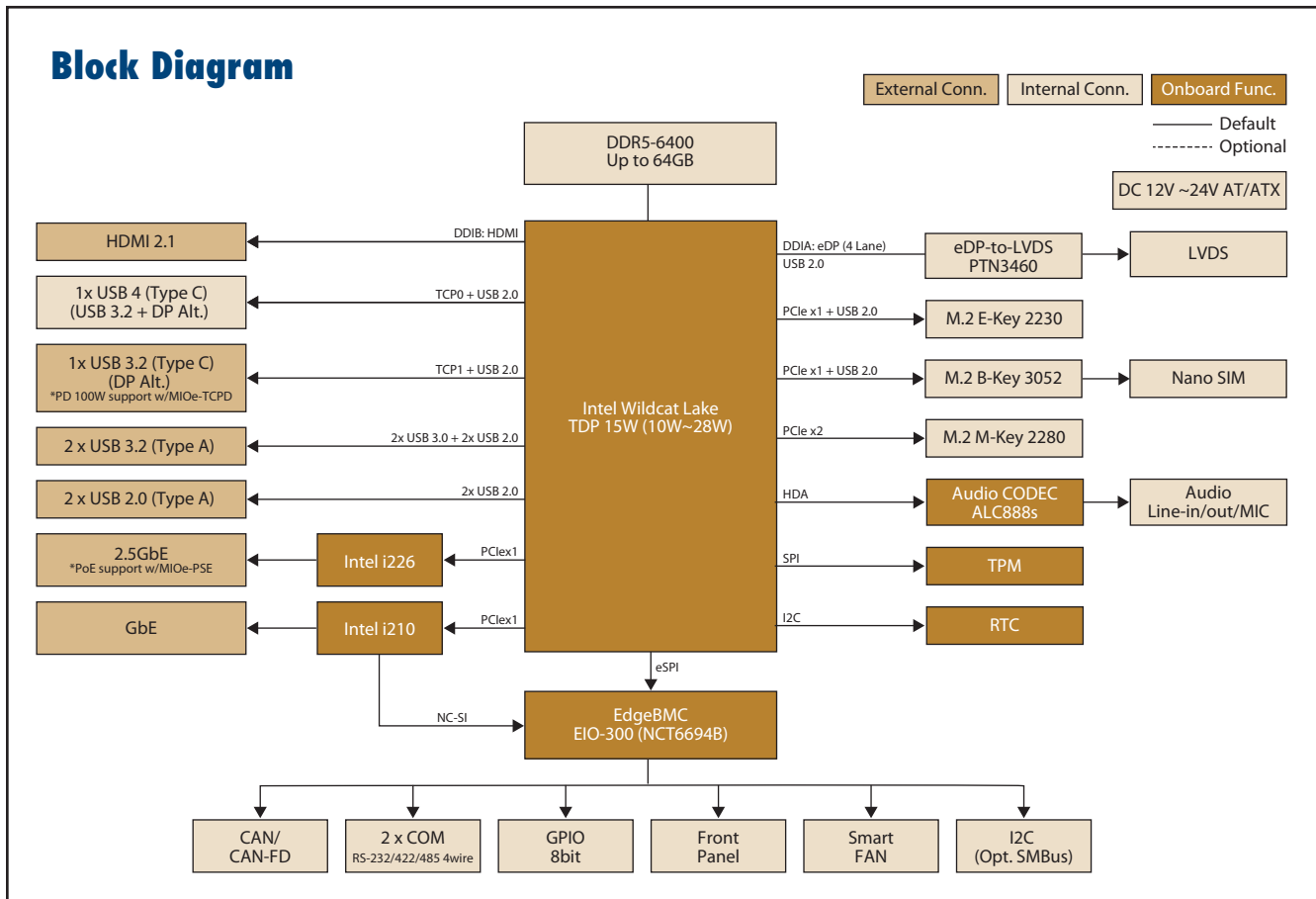





Specifications

Platform	Processor	Core 7, 350	Core 5, 320	Core 3, 304	
	Max. Frequency	4.8 GHz	4.6 GHz	4.3 GHz	
	Base Frequency	1.5 GHz	1.5 GHz	1.5 GHz	
	Core	2P+0E+4LPE	2P+0E+4LPE	1P+0E+4LPE	
	CPU TDP	15W	15W	15W	
Memory	Technology	DDR5-6400 SDRAM			
	Max. Capacity	Up to 64GB			
Graphics	Controller	Intel® Graphics	Intel® Graphics	Intel® Graphics	
	Max. Frequency	2.6 GHz	2.5 GHz	2.3 GHz	
	Number of Execution Units	32	32	16	
Display I/F	DP	1 x DP 1.4a, 1 x DP2.1			
	HDMI	HDMI 2.1			
	LVDS	LVDS			
	Multiple Display	3 simultaneous displays: HDMI + USB Type-C + LVDS			
Ethernet	Controller	LAN1: Intel i210; LAN2: Intel i226			
	Speed	LAN1: 1Gbps; LAN2: 2.5Gbps			
	Ethernet	2 x RJ-45			
External I/O	HDMI/USB-C	1/2			
	USB3.2/2.0	2/2			
	Power DC-Jack	4-pin 90D ATX connector			
	USB	1 x USB-C 4.0			
Internal I/O	Serial Bus	1 x I2C (Optional SMBus)			
	COM Port	2 x RS-232/422/485 (4-wire)			
	GPIO	8-bit general purpose input output I/O			
	Audio	Realtek ALC888S, Line-in/Line-out/MIC			
	Invertor	12V/5V			
	CAN Bus	CAN-FD			
	Fan	4-wire smart fan			
	Front Panel Control	Power-on, Reset, Buzzer, CaseOpen			
	Board Feature	USB-C PD	USB Type-C PD (Power Delivery) 100w (optional MIOe-TCDP module)		
		EdgeBMC OOB	LAN1: Support EdgeBMC Out-of-Band(OOB) remote control		
Watchdog Timer		65536 level, 0-65535 sec			
TPM		TPM2.0			
Expansion	M.2 E-Key	1 x E-Key 2230 (PCIe x 1, USB2.0)			
	M.2 B-Key	1 x B-Key 3052 (PCIe x 1, USB2.0) w/ Nano-SIM			
	M.2 M-Key	2 x M-Key 2280 (PCIe x 2)			
Power	Supply Voltage	Vin: DC 12~24V +/- 10%; RTC Battery: Lithium 3V/210mAH			
	Connector	ATX 2x2 pin 90D (optional DC-Jack or ATX 2x2 pin 180D*)			
	Power Management	AT, ATX			
Environment	Temperature	0 ~ 60 °C (32 ~ 140 °F)			
	Humidity	Operating: 40° C @ 95% relative humidity, non-condensing Storage: 60° C @ 95%relative humidity, non-condensing			
	Vibration Resistance	3.5 Grms			
Certification	EMC	CE, FCC Class B			
Mechanical	Dimensions	146 x 102 mm (5.7" x 4")			

Block Diagram



Ordering Information

Part No.	CPU	Thermal Solution	Operating Temperature
MIO-5356C7-Q8A1	Core 7, 350	Passive Heatsink	0~60° C
MIO-5356C5-Q6A1	Core 5, 320	Passive Heatsink	0~60° C
MIO-5356C3-Q3A1	Core 3, 304	Passive Heatsink	0~60° C

Packing List

Part No.	Description	Quantity
	MIO-5356 SBC	
1700030406-01	USB 2.0 Cable 20cm	1
1700031582-01	COM RS-232/422/485 Cable 20cm	2
TBD	Passive Heatsink	1

Optional Accessories

Part No.	Description
TBD	Heat spreader
MIOe-TCPD	MIOe-TCPD Module

Embedded OS/API

OS	Part No.	Description
Window 11	TBD	IoT Enterprise LTSC 2024
Ubuntu	TBD	Ubuntu Desktop 24.04 LTS

Rear I/O View

