

VC70B-MTH

Intel® Core™ Ultra Processor
In-vehicle System



KEY FEATURES



High Performance Compact in-vehicle system

Core Ultra processor with LPDDR5-6400 soldered memory



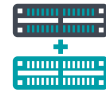
Remote Management

Supports Out of band control



Triple Displays

1 HDMI, 1 DP, 1 USB-C DP Alt. mode



Multiple Expansion

1 M.2 M Key, 1 M.2 B Key, 1 M.2 E Key

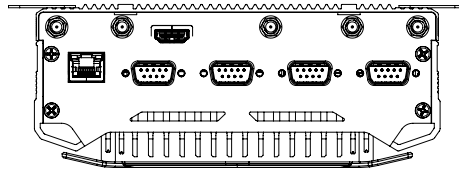


Rich I/O

2 2.5GbE, 1 GbE, 5 USB 3.2, 1 USB-C, 4 COM



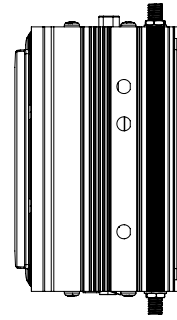
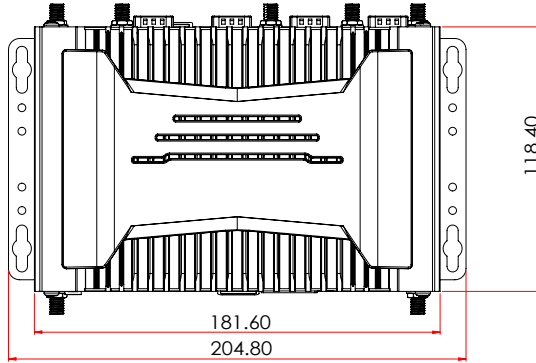
DIMENSIONS



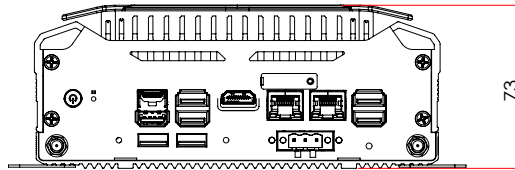
Front View



Left View



Right View



Rear View

SPECIFICATION

SYSTEM	Processor	Intel® Core™ Ultra 7/5 Processors, TDP up to 28W Intel® Core™ Ultra 7 165H, 16C, 24M Cache, 1.4GHz (5.0GHz) Intel® Core™ Ultra 5 135H, 14C, 18M Cache, 1.7GHz (4.6GHz) Intel® Core™ Ultra 7 155U, 12C, 12M Cache, 1.7GHz (4.8GHz) Intel® Core™ Ultra 5 125U, 12C, 12M Cache, 1.3GHz (4.3GHz)
	Memory	Dual Channel LPDDR5/x 6400MHz memory down Up to 32GB (64GB per request)
	BIOS	AMI SPI 256Mbit
GRAPHICS	Controller	Intel® Arc™ Graphics
	Feature	OpenGL 4.6, Direct X 12.2, OpenCL 3.0 HW Decode: HEVC, VP9, AV1, AVC HW Encode: HEVC, VP9,AV1, AVC
	Display	1 x HDMI 1.4b 1 x DP(from eDP) 1 x USB-C DP Alt. mode HDMI: resolution up to 4096x2160@24Hz USB-C DP: resolution up to 4096x2304@60Hz
	Triple Displays	HDMI + DP + USB-C DP Alt. mode
EXPANSION	Interface	1 x M.2 M key 2280 (PCIe Gen4 x4) 1 x M.2 B key 3052 (USB 3.0/2.0, PCIe x1, SATA), 1 x SIM slot for 4G/5G 1 x M.2 E key 2230 (USB 2.0/PCIe x1)
AUDIO	Audio Codec	Realtek ALC888S
ETHERNET	Controller	2 x Intel® I226V (10/100/1000/2500Mbps)
LED	Indicators	1 x Power LED 1 x HDD LED
FRONT I/O	Ethernet	1 x GbE (RJ-45), Intel® i210AT (10/100/1000Mbps) (support OOB)
	Serial	COM 1: RS-232/422/485 COM 2/3: RS-232 COM 4: RS-232/422/485 or 8-bit DIO by jumper setting
	Display	1 x DP(from eDP)
REAR I/O	Ethernet	2 x GbE @ RJ45 connectors
	USB	5 x USB 3.2 1 x USB Type C 2 x USB 2.0 type A
	Display	1 x HDMI 1 x USB-C DP Alt. Mode
	Buttons	1 x Power Button
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds
SECURITY	TPM	TPM 2.0
POWER	Type	9~36V DC
	Connector	3-pin terminal block (VCC/ACC/GND)
	Power Management	1. Ignition On/Off control 2. System On delay time 3. OS Protection Time 4. System Off delay time 5. Car Battery Voltage Monitoring 6. Battery Low Voltage Protect
	RTC Battery	CR2032 Coin Cell (Cable type)
OS SUPPORT	Microsoft	Windows 11 & 10 IoT Enterprise 64-bit
	Linux	Linux
ENVIRONMENT	Temperature	Operating: -20 to 70°C fanless (15W CPU only) Storage: -40 to 85°C
	Humidity	Operating: 5 to 95% RH Storage: 5 to 95% RH
	MTBF	TBD
MECHANISM	Mounting	Wall mount
	Dimensions	181.6mm (W) x 73mm (H) x 118.4mm (D)
	Weight	< 3KG
STANDARDS AND CERTIFICATIONS	Shock	Operating/non-operating: MIL-STD-810G Method 516.6, Procedure 1
	Vibration	Operating/non-operating: MIL-STD-810G Method 514.6, Category 4
	Certification	CE, FCC Class B, eMark, RoHS