

VC70B-PTH

Intel® Core™ Ultra Series 3 processors
In-vehicle System



KEY FEATURES



High Performance Compact in-vehicle system

Intel® Core™ Ultra Series 3 processors with LPDDR5x-8533 memory



Remote Management

Supports Out of band control



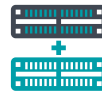
9-axis IMU Sensor

3 Accelerometer + 3 Gyroscope + 3 Magnetometer



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, 2 USB 2.0, 3 COM, 2 CAN FD



IoT Solutions Alliance

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, 28W Intel® Core™ Ultra 7 155U, 12C, 12M Cache, 1.7GHz~4.8GHz, 15W Intel® Core™ Ultra 5 125U, 12C, 12M Cache, 1.3GHz~4.3GHz, 15W
	Memory	Up to 64GB LPDDR5x memory down w/max. 8533
	BIOS	AMI SPI 256Mbit
GRAPHICS	Controller	Intel Arc Graphics
	Feature	DX12, Open GL 4.6, Vulkan 1.2 HW Decode: HEVC/VP9/AV1/AVC/H.265/MJPEG HW Encode: HEVC/VP9/AV1/AVC/H.265/MJPEG
	Display	1 x HDMI 1.4b, Resolution up to 4096x2160@24Hz 1 x DP++, Resolution up to 4096x2160@24Hz 1 x USB-C DP Alt. mode, 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), 1 x SIM slot for 4G/5G 1 x M.2 E key 2230 (USB 2.0/PCIe x1)
ETHERNET	Controller	2 x Intel I226IT (10/100/1000/2500Mbps) 1 x Intel I210IT (10/100/1000Mbps)
LED	Indicators	1 x Power LED 1 x HDD LED
FRONT I/O	Ethernet	2 x 2.5GbE @ RJ45 connectors
	USB	5 x USB 3.2 Type A 1 x USB Type C 2 x USB 2.0 Type A
	Display	1 x HDMI 1 x USB-C DP Alt. Mode 1 x DP++
	SIM	1 x Nano SIM slot
REAR I/O	Ethernet	1 x GbE @RJ-45 connector (support OOB)
	Serial	COM 1: RS-232/422/485 COM 2: RS-232
	CANBus	2 x CAN FD (DB9-M)
	SD	1 x Micro SD slot for OOB
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/IGN/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 (by request)
ENVIRONMENT	Temperature	Operating: -20 to 70°C fanless Operating: -20 to 50°C fanless (28W CPU only) Storage: -40 to 85°C
	Humidity	Operating: 5 to 95% RH Storage: 5 to 95% RH
MECHANISM	Mounting	Wall mount
	Dimensions	181.6mm (W) x 71.5mm (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 A, E-Mark (E24), RoHS, UKCA