



Our Trusted Embedded Systems for Specialized Applications across Diverse Industries.

We provide a diverse range of Application-Specific Systems, expertly tailored to address the unique requirements of industries like Railway, In-Vehicle, Medical, and Agile Infotainment. Each solution is thoughtfully engineered to overcome sector-specific challenges, driving innovation and boosting efficiency across various industries.



Embedded Systems Index

In-Vehicle Systems

V6Xa-ORN



VC500-CMS-MXM



VCX700-MTH



VC70B-MTH



VC700-ASL



VC900-M8M



VP101-M8M



Products Type	Processor	Model	Index
System	10th Gen Intel® Core™ Processor	V6Xa-ORN	P6
		VC500-CMS	
		VC500-CMS-MXM	
	9th/8th Gen Intel® Core™ Processor	VC300-CS	P7
	Intel® Core™ Ultra Processor	VCX700-MTH	
	Intel® Atom® Amston Lake Processor	VC70B-MTH	
Panel PC	Intel® Atom® Processor E3900	VC700-ASL	P8
	Intel® Atom® Processor E3900	VC230-AL	
	NXP i.MX8M Quad, Cortex-A53	VC900-M8M	
Motherboard-Peripheral	Intel® Atom® Processor E3800	VP101-BT	P9
	NXP i.MX 8M Dual/Quad Cortex-A53	VP101-M8M	
	-	MPE-CAN2	P10
	-	M2-CAN2	
	-	M2-GNSS	
	-	X103-DC36	

Railway Systems

RC300-CS



RC700-ASL



Products Type	Processor	Model	Index
System	9th/8th Gen Intel® Core™ Processor	RC300-CS	P11
	Intel® Atom® Amston Lake Processor	RC700-ASL	



Medical Systems

MPC350-RPS

MDPi270

MDP156

Products Type	Processor	Model	Index
System	14th/13th/12th Gen Intel® Core™ Processor	MPC350-RPS	P12
	6th Gen Intel® Core™ Processor	MD711-SU	
Monitor	-	MDPi270	P13
		MDPi238	
		MDPi215	
		MDP156	

Innovative Agile Infotainment Solutions

GM841-HPF

GM840-RNF

GM341-GHF

GM310-8MM

HPT193

GM903

Products Type	Processor	Model	Index
System	Intel® Atom® Alder Lake-N Processors	EC70A-ADN	P14
	AMD® Ryzen™ Embedded 8000 Series	GM841-HPF	
	AMD® Ryzen™ V2000 Series	GM840-RNF	P15
	AMD® Ryzen™ V1000/R1000/R2000 Series	GM341-GHF	
	NXP i.MX 8M Mini	GM310-8MM	
Motherboard-Mini-ITX	BTL-S/14th/13th/12th Gen Intel® Core™	RPS101/RPS103-R680E	P16
		RPS101/RPS103-Q670E	
		RPS101/RPS103-H610E	
	AMD® Ryzen™ Embedded 8000 Series	HPT193	P17
		HPT171	
	AMD® Ryzen™ V2000 Series	RNO171	
		GH171	
Motherboard-Peripheral	FPGA + MCU	GM903	P18

Application-Specific System

Application-Oriented Solutions



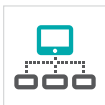
In-Vehicle & Railway Systems

The design of DFI's In-vehicle Computers centers on reliability, MIL-STD anti-vibration, and S/Wap — small, lightweight, and low power consumption. The systems are certificated by E-Mark (E24) to guarantee the quality level of electromagnetic. To provide real-time data analysis, DFI's In-Vehicle systems are built in with Mini PCIe and M.2 expansions for additional connectivity such as 4G/5G, Wi-Fi, GNSS, and CAN-Bus. Wide-temperature, wide-voltage, and in-vehicle power management jointly ensure stability and astonishing endurance even in harsh environments.

Beyond common industry certifications like CE/FCC/RoHS/UL94V0, DFI extends support in securing E-Mark and ISO7637/16750 certifications. Notably, DFI's In-vehicle system also adhere to ITxPT design specifications, simplifying customers' pursuit of membership in the European Public Transport Information Technology Standard (ITxPT) and successfully streamlined government bidding process for our customer.

DFI railway system commits to achieving high versatility and reliability in today's increasingly complex rolling stock operations. With NVIDIA MXM modules and 5G capabilities, they can handle autonomous driving and AI vision in the IoT ecosystem. Moreover, all the essential standards and features for railway system are ready for your requirements including EN50155 EU railway standard, multiple M.2 and mini PCIe (LTE, 5G, Wifi/BT, GNSS, CAN bus, MVB), wide temperature, and wide voltage (77-137.5V).

CAN-Bus Interface Support



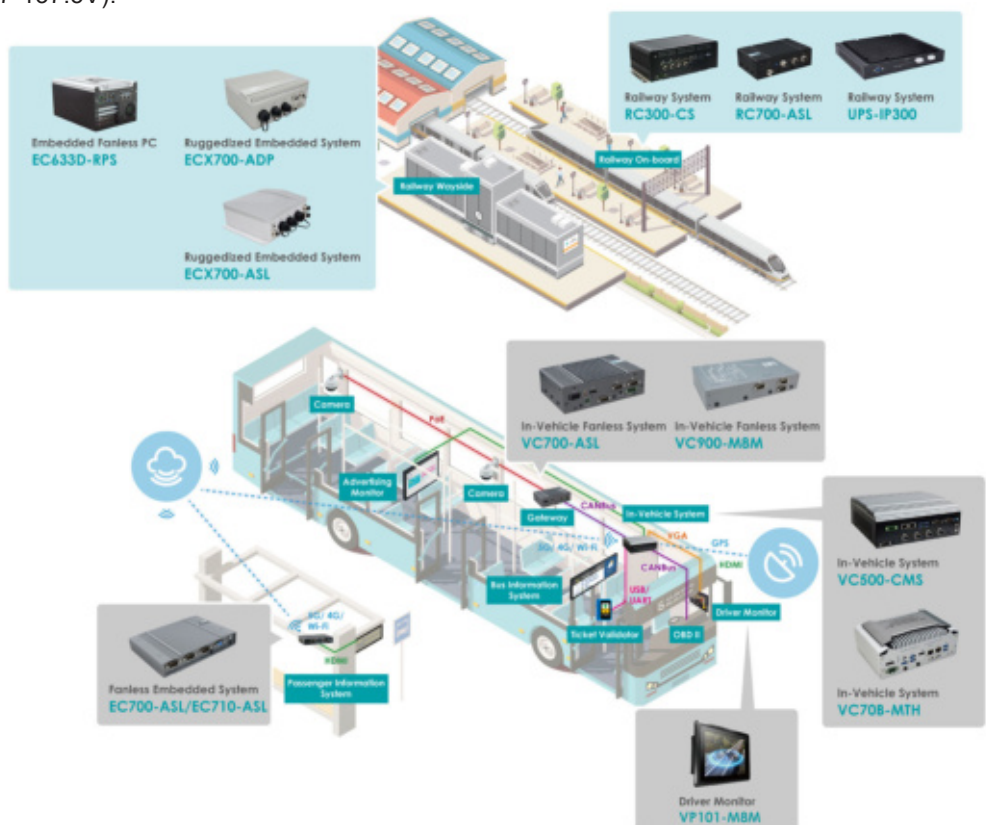
CAN-Bus 2.0A/ 2.0B/ FD
(Support J1939 or CANopen)



In-Vehicle Power Protection Management



In-Vehicle
Graceful Shutdown
(Ignition On/Off Control)



Medical Systems

Medical equipment requires precise results, stable operation, and complete signal integrity across all connected peripherals. As AI-assisted diagnosis becomes mainstream, the demand for computing performance, system expandability, and compliance with international medical standards has grown significantly.

DFI's MPC350-RPS is a medical-grade AI Edge Server powered by Intel® Core™ processors and supporting dual graphics cards (up to 300W each), delivering the high-performance computing needed for AI-assisted imaging and surgical analytics. Its hygienic chassis, high-bandwidth I/O, and secure on-premise AI inference make it ideal for real-time, privacy-critical Smart Healthcare applications.

Certifications: IEC 60601-1-2:2014, IEC 60601-1:2005, CE, FCC, RoHS.

High AI Performance



Support various Nvidia AI GPU Card and Capture card

Medical-Grade Certifications



IEC 60601-1 / IEC 60601-1-2 compliant

Extensive Computing Solutions for Infotainment Excellence

As a global leader in embedded computing, DFI is at the forefront of innovation, offering state-of-the-art solutions that cater to the ever-evolving needs of the Infotainment industry. Our comprehensive portfolio spans advanced systems for casino slots, lottery machines, and player tracking systems, all designed to perform seamlessly in diverse environments worldwide.

Through rigorous system development and uncompromising quality assurance, DFI ensures that our high-performance solutions not only meet but exceed the specific demands of Infotainment enterprises around the globe. With a deep well of industry expertise, we are committed to driving the future of Infotainment technology.



Infotainment I/O & Intrusion Detection



Intrusion Detection



4 Display Ports Support 4K @ 60Hz



4 Displays

Gaming SDK

- Application User Guide
- API Programming Guide
- Driver
- Library
- Sample Code





Model Name		V6Xa-ORN	VC500-CMS	VC500-CMS-MXM	VC300-CS
Platform		-	Desktop	Desktop	Desktop
System	Processor	6/8-core Arm® Cortex®-A78AE v8.2 64-bit CPU	10th Gen Intel® Core™	10th Gen Intel® Core™	9th/8th Gen Intel® Core™
	Socket	-	LGA 1200	LGA 1200	LGA 1151
	Max. Speed	-	3.0~4.5GHz	3.6~4.5GHz	1.8~2.6GHz
	CPU TDP	7-15W / 10-25W	35W	35W	35W
	Cache	-	2/4/6/12/16/20M	6/12/16/20M	9/12M
	Chipset	-	Intel® Q470E/W480E/H420E	Intel® Q470E/W480E	Intel® Q370
	BIOS	-	AMI SPI 256Mbit	AMI SPI 256Mbit	AMI SPI 128Mbit
GPU / AI Accelerator Card Support		NVIDIA® Jetson Orin Nano™/ NX, up to 100TOPS	N/A	Type A/B MXM modules: RTX A2000, RTX3000, A500, A1000	up to 150W GPU MXM module without active fan MXM Type A/B
Memory	Technology	128-bit/64-bit LPDDR5	Dual Channel DDR4 2933/2666/2400/2133 SDRAM (ECC support for Xeon-1270TE)	Dual Channel DDR4 2933/2666/2400/2133 SDRAM (ECC support for Xeon-1270TE)	Dual Channel DDR4 2666/2400MHz
	Max. Capacity	8/16GB	64GB	64GB	64GB
	Socket	onboard	2 SODIMM	2 SODIMM	2 SODIMM
Storage		M.2 2242/2280 M key (NVMe)	2 swappable 2.5" SATA drive bays, 1 M.2 2280 M Key	2 swappable 2.5" SATA drive bays, 1 M.2 2280 M Key	2 Swappable 2.5" Storage bays, 1 M.2 2280 M Key
GNSS		-	-	-	-
Sensor		-	-	-	-
Expansion	PCIe, PCI, Mini PCIe	-	1 mPCIe	1 mPCIe	1 Half mPCIe, 2 Full mPCIe
	M.2	1 M.2 Key E 2230, 1 M.2 Key B 3042/3052	1 M.2 2230 E Key, 1 M.2 3042/3052 B Key, 1 M.2 2242/2280 M Key	1 M.2 2230 E Key, 1 M.2 3042/3052 B Key, 1 M.2 2242/2280 M Key	1 M.2 3042/3052 B Key, 1 M.2 2280 M Key
	microSD, SIM	1 Nano SIM	3 SIM	3 SIM	3 SIM
Audio	Audio Codec		Realtek ALC888S	Realtek ALC888S	Realtek ALC888S
Ethernet	Controller	2 Intel® I210	1 Intel® I219LM, 1 Intel® I210IT	1 Intel® I219LM, 1 Intel® I210IT	5 Intel® I210IT, 1 Intel® I219LM
LED	Indicators		Storage Activity, Power Status, Programmable general purpose	Storage Activity, Power Status, Programmable general purpose	Power, Storage, PoE
I/O	PoE/10G	2 GbE M12 X code with PoE	4x 802.11af PoE (RJ45/M12) or 2x 10GbE (SFP+ cage)	4x 802.11af PoE (RJ45/M12) or 2x 10GbE (SFP+ cage)	4x 802.3af PoE (RJ45/M12)
	Ethernet (GbE)	8 GMSL2 or 4 x PoE	2 GbE (RJ45)	2 GbE (RJ45)	2 GbE (RJ45)
	Serial	1 M12 A Code (Isolated CAN BUS 2.0)	4 RS-232/422/485, 1 RS-232	4 RS-232/422/485, 1 RS-232	2 RS-232/422/485 (DB-9)
	USB	1 USB 2.0 M20, 2 USB 3.0 M20	6/8 USB 3.2	8 USB 3.2	4 USB 3.0, 2 USB 2.0
	Display	1 HDMI	2 DP++, 1 HDMI	3/4 DP++	1 VGA, 1 DP++, 1 HDMI
	DIO	-	8-bit DI + 8-bit DO	8-bit DI + 8-bit DO	8-bit DI + 8-bit DO
	Buttons	Power, Reset Button	Power, Reset	Power, Reset	Power, Reset
	Antenna	6 holes	8 holes	8 holes	7 SMA Holes
	Audio	-	Mic-in, Line-in, Line-out	Mic-in, Line-in, Line-out	Mic-in, Line-out
	OOB	-	RJ45 (Opt.)	RJ45 (Opt.)	-
	CANBus		CAN-Bus via DB-9 port (Opt.)	CAN-Bus via DB-9 port (Opt.)	-
Power		9-36V DC-in	3pin 3W3 connector or 3 pin terminal block, 9~50V DC-in with ignition control	3pin 3W3 connector, 9~50V DC-in with ignition control	12VDC (9~36V), 24VDC (14.4~33.6V) with ignition control
Cooling		Fanless	Passive	Passive	Fanless
OS Support		Linux Jetpack 6.2	Win10 IoT, Win11 IoT, Ubuntu Linux	Win10 IoT, Win11 IoT, Ubuntu Linux	Win10 IoT, Linux Ubuntu
Mechanism	Construction	Aluminum + SGCC	Aluminum + Metal	Aluminum + Metal	Metal + Aluminum
	Mounting	Wall mount	Wall Mount	Wall Mount	Wall Mount
	Dimensions (W x H x D)	237mm x L: 194mm x H: 105.3mm	235 x 87.5 x 221mm (mounting bracket excluded)	346 x 87.55 x 221mm	340.5 x 132 x 223mm
Environment	Operating Temp.	-20°C ~ 70°C Optional -40°C	-20°C~70°C	-20°C~60°C	-20°C~60°C or -20°C~70°C



Model Name		VCX700-MTH	VC70B-MTH	VC700-ASL
Platform		-	-	Intel® Atom®
System	Processor	Intel® Core™ Ultra 7/5 Processor	Intel® Core™ Ultra 7/5 Processor	Intel® Atom x7000RE series processors (Amston Lake)
	Socket	-	-	-
	Max. Speed	4.3~4.8GHz	4.3~5.0GHz	1.0~3.6GHz
	CPU TDP	15W	15/28W	6/9/12W
	Cache	12M	24M	6M
	Chipset	-	-	-
	BIOS	AMI SPI 256Mbit	AMI SPI 256Mbit	AMI SPI 64Mbit
GPU / AI Accelerator Card Support		-	-	-
Memory	Technology	Dual Channel LPDDR5/x 6400MHz	Dual Channel LPDDR5/x 6400MHz	LPDDR5 4800MHz
	Max. Capacity	32GB / 64GB (Opt.)	32GB / 64GB (Opt.)	4/8GB
	Socket	Memory down	Memory down	Memory down
Storage		M.2 SSD default 256GB (512GB by request)	M.2 SSD default 256GB (512GB by request)	2x swappable 2.5" SATA Drive bays (Opt.), eMMC up to 128GB
GNSS		Support by M.2 GNSS module	Support by M.2 GNSS module	Support by Mini PCIe or M.2 modules
Sensor		9-axis IMU (3 Accelerometer + 3 Gyroscope + 3 Magnetometer)	9-axis IMU (3 Accelerometer + 3 Gyroscope + 3 Magnetometer)	9 axis IMU (3 Accelerometer + 3 Gyroscope + 3 Magnetometer)
Expansion	PCIe, PCI, Mini PCIe	-	-	2 mPCIe (1 Half + 1 Full)
	M.2	1 M.2 2280 M Key, 1 M.2 3052 B key, 1 M.2 2230 E Key	1 M.2 2280 M Key, 1 M.2 3052 B Key, 1 M.2 2230 E Key	1 M.2 2230 A+E Key, 1 M.2 3042/3052 B Key, 1 M.2 2242/2280 B+M Key
	microSD, SIM	1 microSD for OOB, 1 Nano SIM	1 microSD for OOB, 1 Nano SIM	1 microSD for OOB, 1 Nano SIM
Audio	Audio Codec		-	HS-100B
Ethernet	Controller	1 Intel® I226IT, 1 Intel® I210IT	2 Intel® I226IT, 1 Intel® I210IT	2 Intel® I210
LED	Indicators	Power Status LED	Power, HDD LED	Power, Storage, Programmable
I/O	PoE/10G	2x 802.11af PoE (M12) (Opt.)	-	-
	Ethernet (GbE)	1 2.5GbE (M12), 1 GbE with OOB (M12)	2 2.5GbE, 1 GbE	2 GbE (M12)
	Serial	2 RS-232	1 RS-232/422/485, 1 RS-232, 1 RS-232/422/485/DIO	2 RS-232/422/485
	USB	4 USB 3.2	5 USB 3.2, 1 USB Type C, 2 USB 2.0	4 USB 3.2
	Display	1 HDMI	1 HDMI, 1 DP++, 1 USB-C DP Alt. mode	1 DP++, 1 HDMI
	DIO	-	8-bit DIO (via COM)	8-bit Isolated DIO with 2.5KV isolation
	Buttons		Reset Button	Reset Button
	Antenna	6 N-type Holes	7 SMA Holes	11 Holes
	Audio	-	-	10W speaker, Line-out, Mic-in
	OOB	1 GbE	1 GbE	1 GbE
	CANBus	2 CAN FD	2 CAN FD	2 CAN 2.0B / CAN FD (Opt.)
Power		9~36V DC-in with ignition control	9~36V DC-in with ignition control	9~36V DC-in with ignition control
Cooling		Fanless	Fanless	Fanless
OS Support		Win10 IoT, Win11 IoT, Linux Ubuntu	Win10 IoT, Win11 IoT, Linux Ubuntu	Win10, Win11, Linux Ubuntu
Mechanism	Construction	-	-	Aluminum + SPGC Metal
	Mounting	Wall mount	Wall mount	Wall mount
	Dimensions (W x H x D)	239.24 x 194 x 101 mm	181.6 x 71.5 x 118.4 mm	182.4 x 61.5/93.5 x 118.4 mm
Environment	Operating Temp.	-20°C~70°C / -40°C~70°C (By request)	-20°C~70°C / -20°C~50°C (28W)	-40°C~70°C



Model Name		VC230-AL	VC900-M8M
Platform		Atom	ARM
System	Processor	Intel Atom® Processor E3900	NXP i.MX 8M Dual/Quad Cortex-A53
	Socket	-	-
	Max. Speed	1.6~2.0GHz	1.3GHz
	CPU TDP	6.5/9/12W	-
	Cache	2M	-
	Chipset	-	-
	BIOS	Insyde SPI 64Mbit	-
GPU / AI Accelerator Card Support		-	-
Memory	Technology	Single Channel DDR3L 1600/1866MHz	Single channel LPDDR4 up to 3200 MHz
	Max. Capacity	8GB	2/4GB
	Socket	1 SODIMM	Memory Onboard
Storage		eMMC up to 64GB, 1 mSATA	eMMC 5.1 up to 64GB (Opt.)
GNSS		Support	-
Sensor		-	6 axis IMU (3 Accelerometer + 3 Gyroscope)
Expansion	PCIe, PCI, Mini PCIe	2 Full mPCIe, 1 Half mPCIe	-
	M.2	-	1 M.2 2242/3042 B Key, 1 M.2 2230 E Key
	microSD, SIM	2 micro SIM	1 microSD, 1 Nano SIM
Audio	Audio Codec	ALC262	SGTL5000
Ethernet	Controller	2 Intel® I210AT	1 AR8035
LED	Indicators	Power, Storage LED	Status LED
I/O	PoE/10G	-	-
	Ethernet (GbE)	2 GbE (RJ45)	1 GbE (RJ45)
	Serial	1 RS-232/422/485	1 RS-232/422/485, 3 RS-232
	USB	2 USB 3.2, 2 USB 2.0	2 USB 3.2, 1 OTG, micro USB
	Display	1 DVI-I, 1 HDMI	1 HDMI
	DIO	8-bit Isolated DIO up to 30V Input	-
	Buttons	Reset Button	Power reset button
	Antenna	5 Holes	4 Holes
	Audio	1 x 4pins 5.00mm terminal block	2W speaker (Opt.) Line-out, MIC-in
	OOB	-	-
	CANBus	2 CAN-Bus (Opt.)	1 CAN-Bus
Power		9~36V DC-in with Ignition control	9~36V with ACC/IGN function
Cooling		Fanless	Fanless
OS Support		Win10, Linux, CentOS 7	Yocto Linux 2.5, Android 9.0 (Opt.)
Mechanism	Construction	Aluminum + SPGC Metal	Sheet Metal
	Mounting	Wall/VESA mount	Wall/DIN-Rail mount
	Dimensions (W x H x D)	180 x 50 x 121.2 mm	220 x 122 x 43 mm
Environment	Operating Temp.	-40°C~70°C	-20°C~70°C



10.1"

10.1"

Model Name		VP101-BT	VP101-M8M
Platform		Atom	ARM
System	Processor	Intel® Atom® Processor E3800	NXP i.MX 8M Dual / Quad Cortex-A53
	Socket	BGA 1170	-
	Max. Speed	1.33~1.91GHz	1.3GHz
	CPU TDP	6W / 10W	-
	Cache	2M / 1M	-
	Chipset	AMI SPI 64Mbit	-
	BIOS	Single Channel DDR3L 1333MHz	Single Channel LPDDR4 3200 MHz
GPU / AI Accelerator Card Support		2GB / 4GB	2GB / 4GB
Memory	Technology	ECC Memory Down	Memory Down
	Max. Capacity	10.1" TFT LCD Panel with Capacitive Touch Screen	10.1" PCAP TFT
	Socket	1280 x 800	1280 x 800
Storage		500 cd/m²	1200 cd/m², 500 cd/m²
GNSS		1 HDMI, 1 VGA	-
Sensor		1x 2.5" SATA 2.0 Drive Bay, 1 micro SD (Opt.), Onboard eMMC (Opt.)	Micro SD, 16GB eMMC (Up to 64GB)
Expansion	PCIe, PCI, Mini PCIe	3 Mini PCIe, 1 SIM	1 M.2 2242/3042 B Key, 1 M.2 2230 E Key, 1 Nano SIM
	M.2	Realtek ALC886	SGTL5000
	microSD, SIM	2 Intel® I210AT	AR8035
Audio	Audio Codec	Power, HDD LED	Power
Ethernet	Controller	2 GbE	1 GbE
LED	Indicators	4 RS-232/422/485, 1 RS-232	1 RS-232/422/485, 3 RS-232, 1 CAN Bus
I/O	PoE/10G	1 USB 3.2 Gen1, 3 USB 2.0	2 USB 3.2 Gen1, 1 OTG micro USB
	Ethernet (GbE)	1 HDMI, 1 VGA	-
	Serial	1 Line-out, 1 Mic-in	1 x 3W Speaker
	USB	Power Button, Reset Button	1 Reset switch, 1 re-download switch
	Display	2	-
	DIO	9~36V DC-in, In-Vehicle Power Management Includes Ignition On/Off and System On/Off Delay Time Control	9~36V DC Power input, with ACC / IGN control
	Buttons	Win10 IoT, Linux	Android 9.0 / Yocto 2.5 (Opt.)
	Antenna	Aluminum Front Bezel	Aluminum + SGCC
	Audio	IP65 Front Panel	IP65 Front Panel
	OOB	Panel / VESA Mount	Panel / VESA Mount
	CANBus	294 x 193 x 65 mm	294 x 193 x 53 mm
Power		1.7 kg	1.67 kg
Cooling		-20°C ~ 60°C	-20°C ~ 70°C
OS Support		5% ~ 85% RH (non-condensing)	10% ~ 90% RH (non-condensing)
Mechanism	Construction	5% ~ 85% RH (non-condensing)	10% ~ 90% RH (non-condensing)
	Mounting	Wall/VESA/DIN Rail Mount	Wall mount
	Dimensions (W x H x D)	184 x 82 x 118.4 mm	182.4 x 56.5/87.5 x 118.4mm
Environment	Operating Temp.	-20°C~60°C	-40°C~70°C



Model Name	MPE-CAN2	M2-CAN2
Form Factor	Mini PCIe	M.2 3042 B-M Key
Ports	1 DB9 connector includes Dual CAN Bus and 1 J1708 ports	1 DB9 connector includes Dual CAN FD
Input Interface	PCIe gold finger or USB header	PCIe/USB gold finger or USB header
Dimensions	50.59 x 30 mm	30 x 42 mm
Applicable Models	-	-
Operating Temp.	-40°C~85°C	-40°C~85°C



Model Name	M2-GNSS
Controller	Ublox NEO-M9V Module
Receiver Type	GPS/QZSS L1 C/A, GLONASS L10F, BeiDou B1I, Galileo E1B/C
Form Factor	M.2 2230 E Key
Input Interface	USB 2.0
Dimensions	22 x 30 mm
Operating Temp.	-40°C~85°C

Model Name	X103-DC36
Input Voltage	9V~36V
Output Voltage	12V/24V
Maximum Output	70W
Ports	1 DC-in Jack (default) or 1 4-pin Power Connector
Dimensions	146 x 55 mm
Operating Temp.	-20°C~70°C



Model Name		RC300-CS	RC700-ASL
Platform		Desktop	Intel® Atom®
System	Processor	9th/8th Gen Intel® Core™	Intel® Atom® Amston Lake
	Socket	LGA 1151	-
	Max. Speed	1.8~2.4GHz	1.0~3.6GHz
	CPU TDP	35W	6/9/12W
	Cache	9/12M	-
	Chipset	Intel® Q370	-
	BIOS	AMI SPI 128Mbit	AMI SPI 64Mbit
GPU / AI Accelerator Card Support		up to 115W GPU MXM module without active fan MXM Type A/B/C	N/A
Memory	Technology	Dual Channel DDR4 2666/2400MHz	LPDDR5 5200MHz
	Max. Capacity	64GB	4GB/8GB
	Socket	2 SODIMM	Memory down
Storage		2/4 Swappable 2.5" SSD Storage bays, 1 M.2 2280 M Key	eMMC 64GB, M.2 2280 B+M key
Expansion	PCIe, PCI, Mini PCIe	1 Half mPCIe, 2 Full mPCIe	-
	M.2	1 M.2 3042/3052 B Key, 1 M.2 2280 M Key	1 M.2 2230 A+E Key, 2 M.2 3042/3052 B Key, 1 M.2 2280 B+M Key
	microSD, SIM	3 SIM	2 Nano SIM, 2eSIM (Optional)
Ethernet	Controller	5 Intel® I210IT, 1 Intel® I219LM	2 Intel® i210
LED	Indicators	Power, Storage, PoE	Power, Storage, Programmable
I/O	PoE/10G	4 PoE (M12)	-
	Ethernet (GbE)	2 GbE (RJ45)	3 GbE (M12 X code)
	Serial	2 RS-232/422/485	2 RS-232/422/485
	USB	4 USB 3.0, 2 USB 2.0	1 USB 3.2 type A, 1 USB 2.0(M12 Acode)
	Display	1 VGA, 1 DP++, 1 HDMI	1 HDMI
	Audio	Mic-in, Line-out	Mic-in, Line-out (internal header)
	DIO	8-bits DI + 8-bits DO	8-bits DIO (Isolated) (Terminal block)
	Buttons	Power, Reset	Reset
	Antenna	7 Holes	7 Holes
Power		77~137.5VDC or 9~36VDC	24~110VDC
Cooling		Fanless	Fanless
OS Support		Win10 IoT, Linux Ubuntu	Win10, Win11, Linux Ubuntu
Mechanism	Construction	Metal + Aluminum	Aluminum + SPGC Metal
	Mounting	Wall Mount	Wall Mount
	Dimensions (W x H x D)	340.5 x 132 x 223 mm	183 x 61.5 x 198 mm
Environment	Operating Temp.	-25°C~55°C / -25°C~70°C	-40°C~70°C



Model Name		MPC350-RPS	MD711-SU
Platform		Desktop	ULT
System	Processor	14th/13th/12th Gen Intel® Core™	6th Gen Intel® Core™
	Socket	LGA 1700	BGA 1356
	Max. Speed	5.1~5.2GHz	2.4~2.6GHz
	CPU TDP	65W	15W
	Cache	30/36M	3/4M
	Chipset	Intel® R680E	-
	BIOS	AMI SPI 256Mbit	Insyde SPI 128Mbit
GPU / AI Accelerator Card Support		Nvidia PCIeexpress GPU Card (Quadro up to RTX6000 ada)	-
Memory	Technology	Dual Channel DDR5 up to 4400MHz (ECC/Non-ECC)	Dual Channel DDR4 2133MHz
	Max. Capacity	192GB	32GB
	Socket	4 UDIMM	2 SODIMM
Storage		2x swappable 2.5" SATA Drive bays, 2 M.2 2242/2260/2280	2x 2.5" SATA 3.0 Drive bays
Expansion	PCIe, PCI, Mini PCIe	2 PCIe x16 (1 x16 signals or 2 x8 signals) 2 PCIe x4	1 PCIe x16, 1 Full mPCIe
	M.2	1 M.2 2230 E Key, 2 M.2 2242/2260/2280 M Key	1 M.2 2242 B Key
	microSD, SIM	-	-
Audio	Audio Codec	Realtek ALC888	Realtek ALC888
Ethernet	Controller	1 Intel® I226LM, 3 Intel® I226V	1 Intel® I210AT, 1 Intel® I219LM
LED	Indicators	Power LED	Power, HDD LED
I/O	PoE/10G	-	-
	Ethernet (GbE)	4 2.5GbE	2 GbE
	Serial	2 RS-232	2 RS-232
	USB	4 USB 3.2 Gen2, 6 USB 3.2 Gen1	4 USB 3.2, 2 USB 2.0
	Display	2 DP++, 1 VGA, 1 HDMI	1 DP, 1 DVI-D
	DIO	-	-
	Buttons	Power	Power
	Antenna	2 Holes	1 Hole
	Audio	Line-out, Mic-in	Line-out, Mic-in
	OOB	-	-
	CANBus	-	-
Power		PSU 700W	9~36V DC-in
Cooling		Active Fan	Fanless
OS Support		Win10 IoT, Win11, Ubuntu Linux	Win7, Win8.1, Win10, WES 7, WE8S, Linux
Mechanism	Construction	Metal	Aluminum + Metal Aluminum
	Mounting	Wall Mount	Wall Mount
	Dimensions (W x H x D)	380 x 180 x 400 mm	182 x 97.6 x 200 mm
Environment	Operating Temp.	0°C~40°C	0°C~40°C



27"



23.8"



21.5"



15.6"

Model Name		MDPi270	MDPi238	MDPi215	MDP156
Display	Display	27" TFT LCD	23.8" TFT LCD	21.5" TFT LCD	15.6" TFT LCD
	Max. Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
	Luminance	300 nits	250 nits	350 nits	250 nits
	Contrast	3000:1	1000:1	1000:1	700:1
	View Angle	178(H) / 178(V)	178(H) / 178(V)	178(H) / 178(V)	-85~85(H) / -85~85(V)
	Color Depth	8 bits	6 bits + FRC	8 bits	6 bits
	Display Colors	16.7M	16.7M	16.7M	262K
	Response Time (ms)	12 (On/Off)	14 (GtG)	22 (On/Off)	30
	Backlight MTBF	30,000 hrs (Min.)	30,000 hrs (Min.)	50,000 hrs (Min.)	50,000 hrs (Min.)
Touch Screen	Type	Projected Capacitive	Projected Capacitive	Projected Capacitive	Projected Capacitive
	Touch Point	10	10	10	10
	Glass Coating	AG	AG	AG	N/A
	Interface	Combo (USB/RS232)	Combo (USB/RS232)	Combo (USB/RS232)	USB
Systems	Color Temperature	Neutral/Warm/Cool/User	Neutral/Warm/Cool/User	Neutral/Warm/Cool/User	9300/7500/6500/5800/sRGB/User
	Gamma Selection	Neutral/2.2/DICOM	Neutral/2.2/DICOM	Neutral/2.2/DICOM	OFF/1.8/2.0/2.2/2.4
	Gamma LUT (bits)	10	10	10	N/A
	OSD Languages	English/French/German/ Italian/Spanish/Japanese	English/French/German/ Italian/Spanish/Japanese	English/French/German/ Italian/Spanish/Japanese	English/Japanese
	Speaker	2 x 2W Speaker	2 x 2W Speaker	2 x 2W Speaker	2 x 2 Watt speaker
I/O Interface	VGA	1 VGA, 1 DP, 1 HDMI	1 VGA, 1 DP, 1 HDMI	1 VGA, 1 DP, 1 HDMI	1 VGA, 1 HDMI
	DP	1 DP1.2	1 DP1.2	1 DP1.2	N/A
	HDMI / DVI	1 HDMI 1.4 or DVI-D	1 HDMI 1.4 or DVI-D	1 HDMI 1.4 or DVI-D	1 HDMI
	Audio	1 Line-in	1 Line-in	1 Line-in	1 Line-in
	Power input	1 DC IN	1 DC IN	1 DC IN	1 DC IN
Power requirements	AC Input	External power adapter, 100 ~ 250V	External power adapter, 100 ~ 250V	External power adapter, 100 ~ 250V	DC 12V /3A, < 36 Watt
	Power Consumption	40W (Max)	40W (Max)	40W (Max)	10W typical, normal operation
Mechanical	Chassis Material	Plastic ABS	Plastic ABS	Plastic ABS	Plastic
	Color	White	White	White	White
	Dimension (W x H x D)	651 x 441 x 175 mm (with Stand) 651 x 402 x 69 mm (w/o Stand)	581 x 400 x 175 mm (with Stand) 581 x 360 x 69 mm (w/o Stand)	537 x 387 x 175 mm (with Stand) 537 x 339 x 69 mm (w/o Stand)	387.8 x 232.9 x 38.45 mm
	Weight	10.3 (with Stand) 8.4 (w/o Stand)	9.5 (with Stand) 7.7 (w/o Stand)	8.2 (with Stand) 6.5 (w/o Stand)	3.5 (w/o Stand)
	Mounting	100 x 100 mm VESA mount	100 x 100 mm VESA mount	100 x 100 mm VESA mount	75 x 75 mm VESA mount
	Operating Temperature	0°C ~ 40°C	0°C ~ 40°C	0°C ~ 40°C	0°C ~ 40°C
	Storage Temperature	-20°C ~ 60°C	-20°C ~ 60°C	-20°C ~ 60°C	-20°C ~ 60°C
	Operating Humidity	cTUVus, CE, FCC-class B	cTUVus, CE, FCC-class B	cTUVus, CE, FCC-class B	CE, FCC, RoHS, UL60601
	Others	RotaryKnob buttons on the side edge Power On/Off, Menu	RotaryKnob buttons on the side edge Power On/Off, Menu	RotaryKnob buttons on the side edge Power On/Off, Menu	7 keys (Menu,Input,Power...)
Certification	Certification	cTUVus(60601 Ed3.1), CE(EN 60601-1, EN60601-1-2.), FCC-class B	cTUVus(60601 Ed3.1), CE(EN 60601-1, EN60601-1-2.), FCC-class B	cTUVus(60601 Ed3.1), CE(EN 60601-1, EN60601-1-2.), FCC-class B	CE, FCC, RoHS, UL60601
Protection	IP level	IP65 Rating Protection in front bezel & IPx1 in back cover	IP65 Rating Protection in front bezel & IPx1 in back cover	IP65 Rating Protection in front bezel & IPx1 in back cover	-

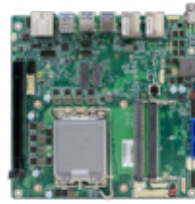
*Populated by default



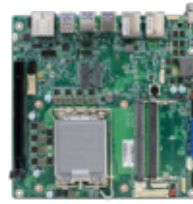
Model Name		EC70A-ADN	GM841-HPF
Platform		Atom	AMD
System	Processor	Intel® Atom® Alder Lake-N	AMD® Ryzen™ Embedded 8000 Series
	Socket	FCBGA1264	LGA 1718
	Max. Speed	3.8GHz	4.9~5.1GHz
	CPU TDP	15W	15~30W / 35~54W
	Cache	6M	6/8M
	Chipset	-	-
	BIOS	AMI SPI 256Mbit	AMI SPI 256 Mbit
GPU / AI Accelerator Card Support		-	-
Memory	Technology	Single Channel DDR5 4800MHz	Dual-channel DDR5 5600/5200/4800MHz (ECC/non-ECC support)
	Max. Capacity	32GB	64GB
	Socket	1 SODIMM	2 SODIMM
Storage		1 M.2 2280/2242 M Key	2 SATA 3.0, 1 2.5" SSD Bay
Expansion	PCIe, PCI, Mini PCIe	-	1 PCIe x16
	M.2	1 M.2 2280/2242 M Key, 1 M.2 3052/3042 B Key, 1 M.2 2230 E Key	1 M.2 2280 M Key
	microSD, SIM	1 SIM	-
Audio	Audio Codec	Realtek ALC888S	Realtek ALC888S
Ethernet	Controller	3 Intel® I226V/IT	2 Intel® I226V
LED	Indicators	Power, HDD LED	Power, HDD LED
I/O	PoE/10G	-	-
	Ethernet (GbE)	3 2.5GbE	2 2.5GHz
	Serial	1 RS-232/422/485 (Opt.)	5 COM + 2 Micro-Fit (4 ccTalk)
	USB	4 USB 3.2, 2 USB 2.0	2 USB 3.2 Gen2, 7 USB 2.0
	Display	1 HDMI, 1 Type-C DP Alt. Mode	4 DP++
	DIO	-	-
	Buttons	-	-
	Antenna	-	-
Infotainment	Audio	Mic-in, Line-out	1 Audio Jack (Line-in/Line-out/Mic-in), S/PDIF Out
	Intrusion Detection	-	8 Intrusion Dections
	NVRAM	-	Supports up to 16Mbyte
	DI/DO	-	32-bit Digital Input, 32-bit OC output
Power		9~36V DC-in	12V~24V DC-in/Right Angle
Cooling		Fanless	1 System Fan
OS Support		Win10 IoT, Linux	Win10 IoT, Win11, Linux Ubuntu, Supplied with Infotainment function SDK
Mechanism	Construction	Aluminum + Metal Aluminum	-
	Mounting	Wall/VESA/DIN rail Mount	Wall Mount
	Dimensions (W x H x D)	181.6 x 52 x 118.4 mm	230 x 140 x 210 mm
Environment	Operating Temp.	-5°C~60°C	0°C~45°C



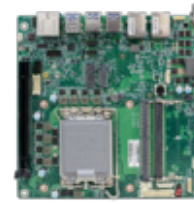
Model Name		GM840-RNF	GM341-GHF	GM310-8MM
Platform		AMD	AMD	ARM
System	Processor	AMD® Ryzen™ V2000 Series	AMD® Ryzen™ V1000/R1000/R2000 Series	NXP i.MX 8M Mini Quad Cortex-A53
	Socket	BGA V2748	FP5 BGA	QFN 56
	Max. Speed	1.7~3.0GHz	3.2~3.8GHz	1.8GHz
	CPU TDP	15/45W	12~54W	-
	Cache	3/4M	1/2/4M	-
	Chipset	-	-	-
	BIOS	AMI BIOS	AMI BIOS (supports hash and public key validation)	-
GPU / AI Accelerator Card Support		-	-	-
Memory	Technology	Dual channel DDR4 up to 3200MHz (ECC/non-ECC support)	Dual Channel DDR4 3200MHz	Single Channel LPDDR4
	Max. Capacity	64GB	32GB	4GB
	Socket	2 SODIMM	2 SODIMM	Memory Down
Storage		2 SATA 3.0, 1 2.5" SSD Bay	2 SATADOM with 7-pin VCC	eMMC 5.1 8GB on board
Expansion	PCIe, PCI, Mini PCIe	-	-	1 mPCIe
	M.2	1 M.2 2280 M Key (2242 by BOM opt.)	1 M.2 2280 M Key	-
	microSD, SIM	-	-	-
Audio	Audio Codec	Realtek ALC888S	5.1 Channel Audio Output, S/PDIF, Stereo 10W+10W Class D Audio AMP Output	Cirrus Logic WM8524
Ethernet	Controller	2 Realtek RTL8119-CG	2 Realtek Ethernet LAN	1 LAN7500, 1 AR8031
LED	Indicators	Power, HDD LED	Power, HDD LED	Status LED
I/O	PoE/10G	-	-	-
	Ethernet (GbE)	2 GbE	2 GbE	2 GbE
	Serial	8 COM (2 ccTalk)	5 COM (1 ccTalk)	1 x RS-232/422/485 (Support SAS 9-bit)
	USB	2 USB 3.1 Gen1, 6 USB 2.0	2 USB 3.2, 4 USB 2.0	3 USB 2.0
	Display	4 DP++	3/4 DP++	1 LVDS, HDMI (Opt.)
	DIO	-	-	-
	Buttons	-	Power, Reset Button	-
	Antenna	-	-	-
	Audio	1 Audio Jack (Line-in/Line-out/Mic-in), S/PDIF Out	-	1 Header (Line-out)
Infotainment	Intrusion Detection	8 Intrusion detection	8 Intrusion detection	-
	NVRAM	Supports up to 16Mbyte	Supports up to 16Mbyte	256KB
	DI/DO	32-bit Digital Input, 32-bit OC output	32-bit Digital Input, 32-bit OC output	-
	iButton	Support iButton 1-wire protocol	Support iButton 1-wire protocol	-
Power		12V DC-in	12V DC-in	12V~24V DC-in
Cooling		1 System Fan	CPU Fan	Fanless
OS Support		Win10 IoT, Linux Ubuntu, Supplied with Infotainment function SDK	Win10, Linux	Linux Yocto 2.5
Mechanism	Construction	-	-	-
	Mounting	Wall Mount	Wall Mount	Wall Mount
	Dimensions (W x H x D)	220 x 125 x 200 mm	270 x 63 x 200 mm	143 x 100 x 35 mm
Environment	Operating Temp.	0°C~45°C	0°C~45°C	-5°C~60°C



R680E



Q670E



H610E

Model Name		RPS101/RPS103-R680E	RPS101/RPS103-Q670E	RPS101/RPS103-H610E
Platform		Workstation	Desktop	Desktop
System	Processor	BTL-S/14th/13th/12th Gen Intel® Core™	BTL-S/14th/13th/12th Gen Intel® Core™	BTL-S/14th/13th/12th Gen Intel® Core™
	Socket	LGA 1700	LGA 1700	LGA 1700
	Max. Speed	2.4~5.8GHz	2.4~5.8GHz	2.4~5.8GHz
	TDP	35~65W	35~65W	35~65W
	Cache	4~36M	4~36M	4~36M
	Chipset	Intel® R680E	Intel® Q670E	Intel® H610E
	BIOS	AMI SPI 256Mbit	AMI SPI 256Mbit	AMI SPI 256Mbit
Memory	Technology	Dual Channel DDR5 5600MHz (support ECC)	Dual Channel DDR5 5600MHz	Dual Channel DDR5 5600MHz
	Max. Capacity	64GB	64GB	64GB
	Socket	2 SODIMM	2 SODIMM	2 SODIMM
Graphics	Connector	1 HDMI, 1 DP++, 1 USB Type-C, 1 eDP/LVDS, 1 DFI EXT-Display Port	1 HDMI, 1 DP++, 1 USB Type-C, 1 eDP/LVDS, 1 DFI EXT-Display Port	1 HDMI, 1 DP++, 1 eDP/LVDS, 1 DFI EXT-Display Port
Expansion	PCIe, PCI, Mini PCIe	1 PCIe x16	1 PCIe x16	1 PCIe x16
	M.2	1 M.2 B key 2242/3042/3052, 1 M.2 E key 2230, 1 M.2 M key 2280	1 M.2 B key 2242/3042/3052, 1 M.2 E key 2230, 1 M.2 M key 2280	1 M.2 B key 2242/3042/3052, 1 M.2 E key 2230, 1 M.2 M key 2280
	SIM, Other	1 Nano SIM	1 Nano SIM	1 Nano SIM
Audio	Audio Codec	ALC888	ALC888	ALC888
Ethernet	Controller	1 Intel® I226LM, 1 Intel® I226V	1 Intel® I226LM, 1 Intel® I226V	2 Intel® I226V
Rear I/O	Ethernet	2 2.5GbE	2 2.5GbE	2 2.5GbE
	Serial	-	-	-
	USB	5 USB 3.2 Gen2, 1 USB Type-C	5 USB 3.2 Gen2, 1 USB Type-C	2 USB 3.2 Gen2, 1 USB 3.2 Gen1, 2 USB 2.0
	Display	1 HDMI, 1 DP++, 1 USB Type-C	1 HDMI, 1 DP++, 1 USB Type-C	1 HDMI, 1 DP++
	Audio	-	-	-
Internal I/O	Serial	2 RS-232/422/485	2 RS-232/422/485	2 RS-232/422/485
	USB	4 USB 2.0	4 USB 2.0	2 USB 2.0
	Display	1 eDP/LVDS, 1 DFI EXT-Display Port	1 eDP/LVDS, 1 DFI EXT-Display Port	1 eDP/LVDS, 1 DFI EXT-Display Port
	Audio	1 Front Audio (Line-out, Mic-in)	1 Front Audio (Line-out, Mic-in)	1 Front Audio (Line-out, Mic-in)
	Storage	2 SATA 3.0, 2 SATA Power, (RAID 0/1/5/10)	2 SATA 3.0, 2 SATA Power, (RAID 0/1/5/10)	2 SATA 3.0, 2 SATA Power, (RAID 0/1/5/10)
	DIO	8-bit DIO	8-bit DIO	8-bit DIO
	LPC**	-	-	-
	SMBus	1	1	1
TPM / iAMT		Nuvoton TPM 2.0, iAMT	Nuvoton TPM 2.0, iAMT	Nuvoton TPM 2.0
Power		12V / 12~28V DC-In	12V / 12~28V DC-In	12V / 12~28V DC-In
Operating Temperature		-5°C~65°C	-5°C~65°C	-5°C~65°C

**Supports LPC EXT-RS232/RS485 module



AMD



AMD



AMD

Model Name		HPT193	HPT171	RNO171
Platform		AMD	AMD	AMD V-Series
System	Processor	AMD® Ryzen™ Embedded 8000 Series	AMD® Ryzen™ Embedded 8000 Series	AMD® Ryzen™ Embedded V2000 Series
	Socket		-	FP6
	Max. Speed	4.9~5.1GHz	4.9~5.1GHz	3.95~4.25GHz
	TDP	15~30W / 35~54W	15~30W / 35~54W	15/45W
	Cache	6/8M	6/8M	3/4M
	Chipset	-	-	-
	BIOS	AMI SPI 256Mbit	AMI SPI 256Mbit	AMI BIOS
Memory	Technology	Dual Channel DDR5 5600/5200/4800MHz (ECC/non-ECC support)	Dual Channel DDR5 5600/5200/4800MHz (ECC/non-ECC support)	Dual Channel DDR4 3200MHz (ECC supported by selected SKU)
	Max. Capacity	96GB	96GB	64GB
	Socket	2 SODIMM	2 SODIMM	2 SODIMM
Graphics	Connector	4 DP++	4 DP++ or 3 DP++ + 1 M.2 A display	4 DP++
Expansion	PCIe, PCI, Mini PCIe	1 PCIe x16	1 PCIe x16	1 PCIe x16
	M.2	1 M.2 M Key 2280	1 M.2 M Key 2280, 1 M.2 A Key 3030	1 M.2 M key 2280
	SIM, Other	GIO1, GIO2	eMMC B2B header, GIO1, GIO2	-
Audio	Audio Codec	Realtek ALC888S	1 Realtek ALC888S, 1 Realtek ALC105(3W)	Realtek ALC888S
Ethernet	Controller	2 Intel® I226V	2 Intel® I226V	2 Realtek RTL8119-CG
Rear I/O	Ethernet	2 2.5GbE	2 2.5GbE	2 GbE
	Serial	1 RS-232, 1 RS-232/RS422/RS485	1 RS-232, 1 RS-232/RS422/RS485	1 RS-232, 1 RS-232/RS422/RS485
	USB	1 USB 3.2 Gen2, 2 USB 2.0	2 x USB 3.2 Gen2 2 x USB 2.0	2 USB 3.2 Gen1, 2 USB 2.0
	Display	4 DP++	4 DP++ or 3 DP++ + 1 M.2 A display	4 DP++
	Audio	1 Front audio (Line-out, Line-in, Mic-in)	1 Front audio (Line-out, Line-in, Mic-in)	1 Audio Jack (Lin-out/Mic-in/Line-in)
Internal I/O	Serial	2 RS-232 (TTL), 2 RS-232 (ccTalk)	2 RS-232 (TTL), 2 RS-232 (ccTalk)	4 RS-232
	USB	4 USB 2.0, 1 USB 2.0 vertical	4 USB 2.0, 1 USB 2.0 vertical	3 USB 2.0 + 1 USB 2.0 Vertical Type A or 4 USB 2.0 (Opt.)
	Display	-	-	-
	Audio	1 S/PDIF	1 3W Speaker L/R header, 1 S/PDIF	1 Front Audio(Mic-in/Line-out), 1 S/PDIF
	Storage	2 SATA 3.0	2 SATA 3.0	2 SATA 3.0
	DIO	8-bit DIO	8-bit DIO	-
	LPC**	-	-	-
	SMBus	2 I ² C, 1 SPI	2 I ² C, 1 SPI	-
TPM / iAMT		dTPM 2.0, fTPM (Opt.)	dTPM 2.0, fTPM (Opt.)	TPM 2.0 (Opt.)
Power		12~24V DC-in/Straight Type	12V DC In	12V DC In
Operating Temperature		-5°C~65°C	-5°C~65°C	-5°C~65°C

**Supports LPC EXT-RS232/RS485 module



Model Name		GM903
Processor	FPGA + MCU	FPGA & MUC implementation of the Infotainment features controller
Internal I/O	USB	Pin header for USB 2.0 signal input
	UART	Pin header for UART signal input
	I2C	Pin header for I2C signal input
	Host Interface	High/low speed connector, 1 PCIe x1 slot (Gold finger)
Infotainment	Intrusion Detection	8 intrusion detection
	DI/DO	32-bit Digital Input, 32-bit OC output
	iButton	Support iButton 1-wire protocol, ds1996 device
	Meter Power	8 ports can be set as meter output with disconnect detect
	Serial	2 RS232/CCTalk (TX/RX)
	Audio	Stereo 6W+6W Class D Audio AMP Output
	Security	SHA-256 or AES-256, 128B RBG (Opt.)
	SRAM (NVRAM)	Support 2pcs SRAM (BGA type)
	EEPROM	EEPROM 2KB
	Coin battery	1 CR2032 Lithium 3V/220mAh with socket type, 1 header for cable type
Hardware	Dimension	170 x 113 mm
Power		12V DC-in

