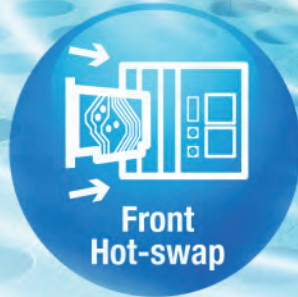


Conquers Harsh Environments MIC-3100

Advantech's Highly Robust Computing Platform

- ✓ Vibration Proof
- ✓ Expandability
- ✓ Compatibility



ADVANTECH

Enabling an Intelligent Planet

www.advantech.com

Redefine the Standards of IPC

The MIC-3100 Highly Robust Industrial PC

A Solution to Solve the Stability Problems of Traditional IPCs in Harsh Environments

Advantech is proud to present a whole new generation of industrial computer - MIC-3100 series. This platform has highly robust structure; by using CPCI interface it's given great ventilation and anti-vibration attributes. The MIC-3100 also supports front hot-swapping which makes card switching and maintenance a lot easier. In order to ensure a high degree of compatibility and lower the investment cost, the MIC-3100 follows the common PICMG 2.x open architecture standard. The above specifications make the MIC-3100 a truly robust computing platform for extreme working environments.



Equipment vibration lowers PCI card stability

Equipment installed with robots usually affects the stability of the IPC because of serious vibration while operating.



MIC-3100 series Made to Conquer 4 Major Difficulties of a Traditional IPC



PCI cards need to be re-installed owing to vibration during transportation

Bumps during equipment transportation usually affect the firmness of PCI card inserted. All cards need to be re-installed when the IPC is delivered.



PCI interface easily gets oxidized in an etch environment

In an etch environment, PCI interface usually gets oxidized and seriously shortens the longevity and needs to be frequently replaced with spare parts. This also raises the potential investment cost.



Dissatisfaction owing to the instability of PCI interface

Out sourced PCI cards are not usually quality guaranteed, engineers need to pay a lot of effort in problem solving and the technical support from vendors is not always available.



European card design

- Highly Efficient cooling
- Anti-vibration
- EMC certification compliance



2mm pin metric connectors

- Air-tight seal connector design
- Anti-corrosion
- Great system reliability



Modular Design

- Front hot-swap enabled
- Easy for maintenance
- Great expandability



Support PCI & CPCI interface

- High Compatibility
- Easy to integrate



PICMG 2.x Open standard

- Easy for integration
- Comply with international standard



Low noise design

- 40dB Ultra low system noise

User's Experience



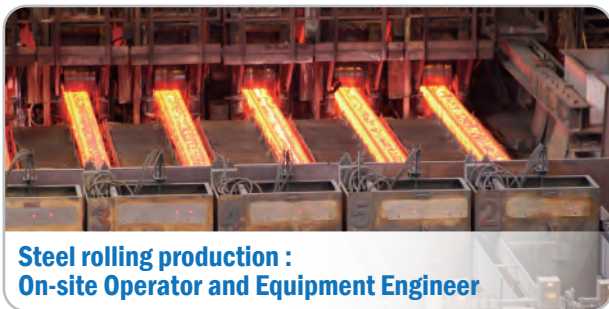
Auto Parts Manufacturer : Chief Engineer

The MIC-3100 series' front hot-swap function makes maintenance a lot easier. The probability of facility malfunction is significantly lowered and the production efficiency is raised by 90%.



In-vehicle Testing Equipment : System Engineer

Traditional vehicle computers often confront unexpected situations while in motion. The MIC-3100 is compatible with both CPCI & PXI interfaces which ensures stability even during rough journeys.



Steel rolling production : On-site Operator and Equipment Engineer

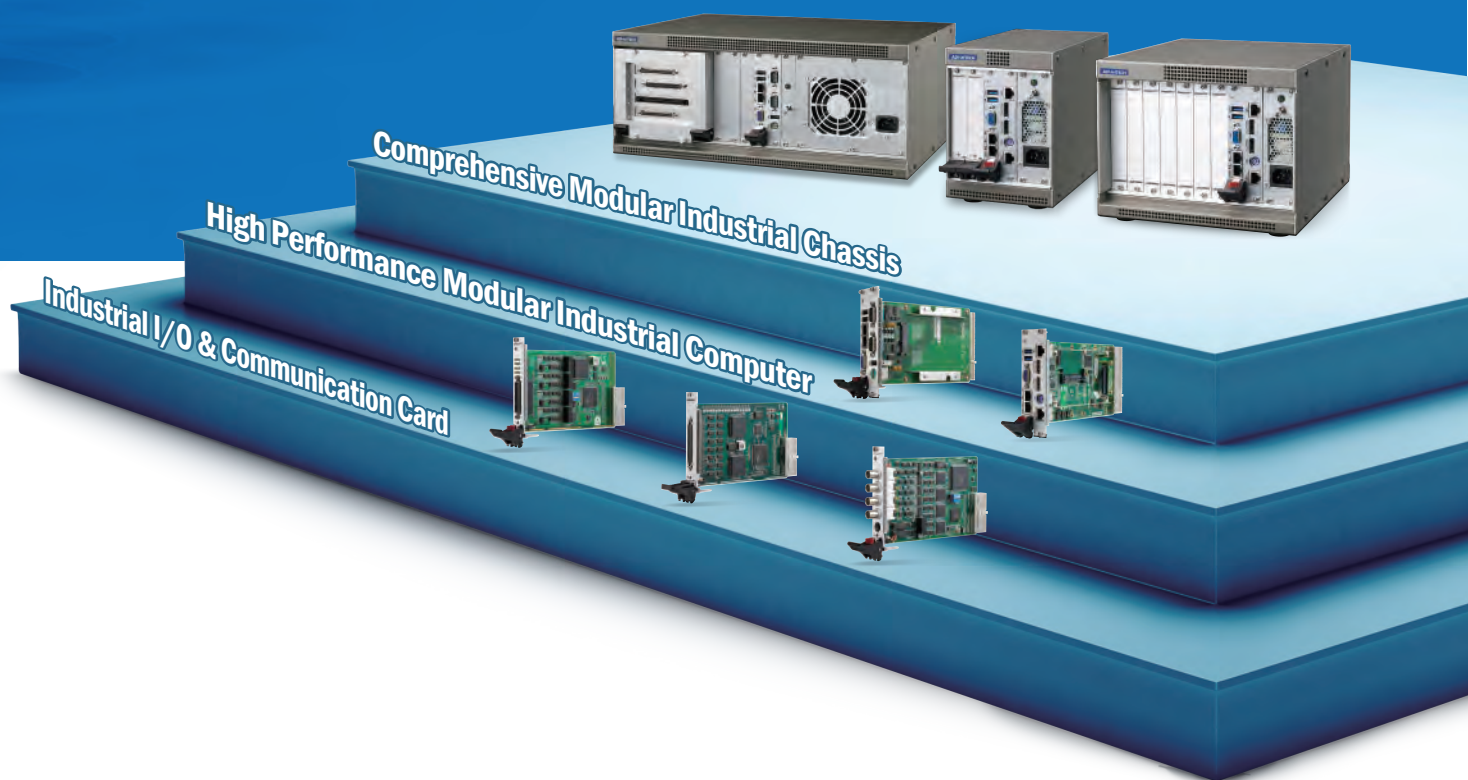
Traditional IPC's PCI card interface often rusts in harsh environments and causes control malfunction or data reception error. The MIC-3100's CPCI interface has strong ability to with stand harsh environments.



Simulation Training Devices: Field Devices Lecturer

It's hard to swap cards installed in traditional IPC chassis and maintenance work is another difficulty. After replacing with the MIC-3100, its strong solid-joint design perfectly overcomes all the problems.

MIC-3100 series system configuration



Compact PCI Cards

Compact PCI Communication Cards

MIC-3611	4-port RS-422/485 Communication Cards, w/Surge and Isolation Protection
MIC-3612	4-port RS-232/422/485 Communication CPCI Card with Surge Protection
MIC-3620	8-port RS-232 Communication CPCI Card
MIC-3680	2-port Isolated CAN Communication CPCI Cards

Compact PCI I/O Cards

MIC-3714	30 MS/s, Simultaneous 4-ch Analog Input CPCI Card
MIC-3716	250 kS/s, 16-bit, 16-ch CPCI Multifunction Card
MIC-3723	16-bit, 8-ch Non-isolated Analog Output CPCI Cards
MIC-3753	72-ch Digital I/O Cards
MIC-3756	64-ch Isolated Digital I/O CPCI Card
MIC-3758	128-ch Isolated Digital I/O CPCI Card
MIC-3761	8-ch Relay and Isolated Digital Input CPCI Card
MIC-3780	8-ch Counter/Timer CPCI Cards

Ordering info :

250 kS/s, 16-bit, 16-ch CPCI Multifunction Card

64-ch Isolated Digital I/O CPCI Card

Specifications



Model Name	MIC-3106-00	MIC-3111-00	MIC-3121-00
Power Type	ATX		
Input Voltage	100 - 240 VAC		100 - 127 VAC 200 - 240 VAC
Wattage	180W		300W
On/Off Switch	Lockable Toggle Switch		
System Slot	1, on the right		
Peripheral Slot	2 Slots	7 Slots	7 Slots
PCI Bus	32-bit 33MHz		32-bit 33MHz
Dimensions (W x H x D mm)	134 x 177 x 238	234 x 177 x 258	482 x 177 x 310
Weight (kg)	4.33	6.14	9.65
Temperature	Operating	0 ~ 50°C	
	Non-Operating	-20 ~ 60°C	
Humidity (non-condensing)	Operating	10 ~ 85% @ 40°C	
	Non-Operating	10 ~ 95% @ 40°C	
Vibration (5 ~ 500 Hz)	Operating	2Grms (without HDD)	
	Non-Operating	2G	
Shock (11ms)	Operating	10G	
	Non-Operating	30G	
Regulatory Compliance	CE, FCC, CCC, UL, RoHS, BSMI PICMG 2.0 Rev. 3.0		

Ordering info :

- MIC-3121-00-AE: Modular Industrial Chassis 4U, 7 slots, w/ 300W
- MIC-3121-L1-AE: 4U, 7 slots, w/ 300W, MIC-3325N
- MIC-3121-L2-AE: 4U, 7 slots, w/ 300W, MIC-3325D
- MIC-3121-H1-AE: 4U, 7 slots, w/ 300W, MIC-3328A

- MIC-3111-00-AE: Modular Industrial Chassis 4U, 7 slots, w/ 180W
- MIC-3111-L1-AE: 4U, 7 slots, w/ 180W, MIC-3325N
- MIC-3111-L2-AE: 4U, 7 slots, w/ 180W, MIC-3325D
- MIC-3111-H1-AE: 4U, 7 slots, w/ 180W, MIC-3328A

- MIC-3106-00-AE: Modular Industrial Chassis 4U, 2 slots, w/ 180W
- MIC-3106-L1-AE: 4U, 2 slots, w/ 180W, MIC-3325N
- MIC-3106-L2-AE: 4U, 2 slots, w/ 180W, MIC-3325D
- MIC-3106-H1-AE: 4U, 2 slots, w/ 180W, MIC-3328A

- MIP-3104-AE: MIC-3100 PCI Hybrid Box



PCI Hybrid Box

Backplane	CPCI interface to chassis	1 for chassis
	PCI slot	4 Slots
	PCI Slot power	12 V @ 2.5 A, -12 V @ 0.8 A, +5 V @ 4 A, +3.3 V @ 3 A
Dimensions (W x H x D mm)		142 x 131 x 213
Weight (g)		725

Compact PCI Modular Industrial Computer

		L1	L2	H1	H2
Processor	CPU	Intel Atom N455, 1.66GHz	Intel Atom D525, 1.8GHz	Intel 3rd Gen. Core i3-3217UE, 1.6GHz	Intel 3rd Gen. Core i7-3517UE, 1.7 GHz
	Memory	2GB On board	2GB On board	4GB On board	4GB On board
	Storage	1 x CompactFlash Type II 1 x 2.5" SATA HDD	1 x CompactFlash Type II 1 x 2.5" SATA HDD	1 x CFast 1 x 2.5" SATA HDD	1 x CFast 1 x 2.5" SATA HDD
Front I/O	VGA	1 x DB15 port	1 x DB15 port	1 x DB15 port	1 x DB15 port
	Ethernet	2 x 10/100/1000 Mbps, RJ45 connector	2 x 10/100/1000 Mbps, RJ45 connector	2 x 10/100/1000 Mbps, RJ45 connector	2 x 10/100/1000 Mbps, RJ45 connector
	USB 2.0	3 x Type A	3 x Type A	2 x Type A	2 x Type A
	Serial	2 x RS-232, DB9 connector	2 x RS-232, DB9 connector	2 x RS-232, RJ45 connector	2 x RS-232, RJ45 connector
	PS/2	1	1	1	1

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