
Datasheet

ADVANTECH

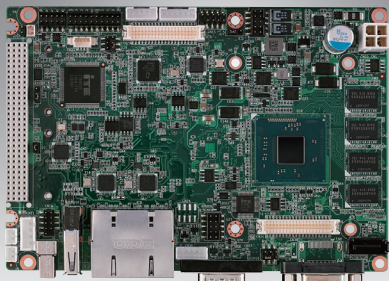
PCM-9365

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PCM-9365

Intel® Atom™ E3825 & Celeron® N2930, 3.5" SBC, 2GB/4GB On-board Memory, VGA, 48-bit LVDS, 2GbE, Mini PCIe, PCI-104, iManager

NEW



iManager susiAccess **CE FCC**

Features

- Intel® Atom™ E3825 & Celeron® N2930, DDR3L-1066/1333MHz 2GB/4GB on-board memory
- DirectX11, OpenGL3.2, OpenCL1.1, 3 independent display: VGA+LVDS/HDMI+LVDS*/Dual LVDS
- Support PCI-104 expansion
- 2 GbE, rich I/O: 4COM, SATA, USB3.0, SMBus/I²C, GPIO, full-size Mini PCIe, full-size mSATA
- Supports iManager (SUSI 4.0), SUSIAccess and Embedded Software APIs

Software APIs:



Utilities:

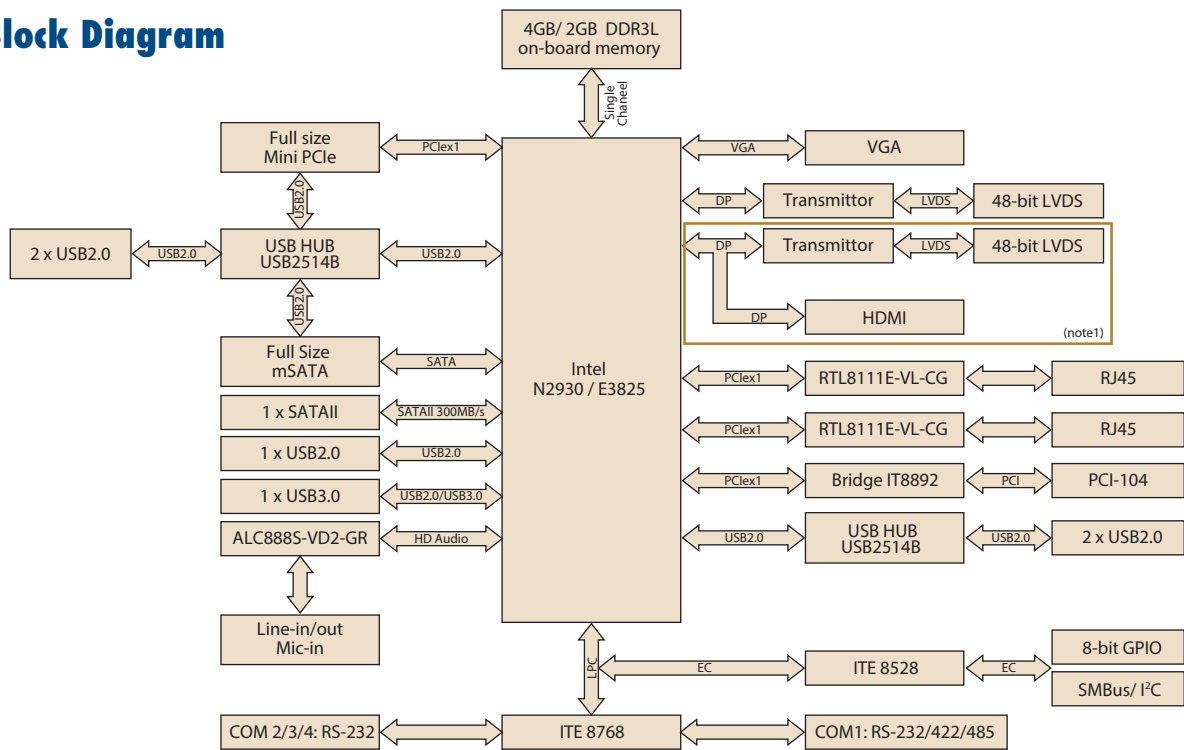


Specifications

Processor System	CPU	Intel Celeron N2930	Intel Atom E3825
	Base Frequency	1.83 GHz (Quad-Core)	1.33 GHz (Dual-Core)
	Max Turbo Frequency	2.16 GHz	-
	L2 Cache	2MB	1MB
Memory	BIOS	AMI UEFI BIOS at 64 Mb	
	Technology	DDR3L 1333 MHz	DDR3L 1066 MHz
	Max. Capacity	4 GB	
Display	On-board memory	Yes	
	Controller	Intel Gen7 graphic engine	
	Processor Graphics	DirectX11, OpenGL3.2, OpenCL1.1	
	VGA	Full HW acceleration, decode: H.264, MPEG2/4, VC-1, WMV9. Encode: H.264, MPEG2	
	LVDS	2560 x 1600 at 60Hz	
	HDMI	48-bit dual LVDS up to WUXGA 1920 x 1200 at 60Hz, the 2nd LVDS is supported by request	
Ethernet	Speed	Supports 3.3/5/12V for VDD power, 1A@5V/12V for inverter	
	Controller	HDMI 1.4a for HD video playback, 1080P at 60Hz	
	Connector	VGA + LVDS, HDMI*+ LVDS, LVDS + LVDS*	
Audio	Speed	10/100/1000Mbps	
	Controller	Realtek RTL8111E-VL-CG	
WatchDog Timer	Connector	2 RJ45	
	Codec	Realtek ALC888S, High Definition Audio (HD), Line-in, Line out, Mic-in	
Storage	SATA	Output System reset, Programmable counter from 1 - 255 minutes/ seconds	
	mSATA	1, up to 3Gb/s (300 MB/s)	
Rear I/O	mSATA	1 x Full-size	
	Ethernet	2 (10/100/1000Mbps)	
	VGA	1	
	HDMI	1 (support by request)	
	USB 2.0	1	
	USB 3.0	1	
Internal I/O	Serial	1 RS232/422/485 support auto flow control	
	Serial	3 RS-232 (ESD protection: Air gap ±15kV, Contact ±8kV)	
	I ² C	4	
	I ² C	1 (Shared with SMBus pin)	
Expansion	SMBus	1	
	GPIO	8-bit	
Power	Mini PCIe	1 x Full-size	
	Power Type	PCI-104 Expansion	
	Power Supply Voltage	Single 12V DC power input	
Environment	Power Consumption (Typical)	12V ± 10%	
	Power Consumption (Max, test in HCT)	PCM-9365E-2GS3A1E : 0.39A @ 12V (4.68W) PCM-9365EV-4GS3A1E : 0.44A @ 12V (5.28W) PCM-9365N-4GS8A1E : 0.509A @ 12V (6.108W)	
	Power Management	PCM-9365E-2GS3A1E : 0.49A @ 12V (5.88W) PCM-9365EV-4GS3A1E : 0.554A @ 12V (6.648W) PCM-9365N-4GS8A1E : 0.745A @ 12V (8.94W)	
	Battery	ACPI	
	Operational	Lithium 3 V / 210 mA	
Physical Characteristics	Non-Operational	0 - 60° C with 0.7m/s air flow (32 - 140° F) (Operational humidity: 40° C @ 95% RH Non-Condensing)	
	Dimensions (L x W)	-40° C - 85° C and 60° C @ 95% RH Non-Condensing	
	Weight	146 x 102 mm (5.7" x 4"), same as 3.5"	
Physical Characteristics	Height	0.54kg (1.19lb), weight of total package	
	Height	Top Side: 19.5 mm; Bottom Side: 7.8 mm; PCB: 1.6 mm	

* The specification is supported by request

Block Diagram



Note1: Supported by request

Ordering Information

Part No.	CPU	Onboard Memory	LVDS	VGA	GbE	Audio	RS-232/422/485	RS-232	USB 3.0	USB 2.0	SATAII	Mini PCIe	mSATA	PCI-104	Power connector	Thermal Solution*	Operating Temp.
PCM-9365E-2GS3A1E	Intel E3825 1.33GHz 6W	2GB	48-bit	Yes	2	Yes	1	3	1	5	1	Full-size	Full-size	Yes	2x2pin	Passive	0 ~ 60° C
PCM-9365EV-4GS3A1E	Intel E3825 1.33GHz 6W	4GB	48-bit	Yes	2	Yes	1	3	1	5	1	Full-size	Full-size	Yes	2x2pin	Passive	0 ~ 60° C
PCM-9365N-4GS8A1E	Intel N2930 1.83GHz 7.5W	4GB	48-bit	Yes	2	Yes	1	3	1	5	1	Full-size	Full-size	Yes	2x2pin	Passive	0 ~ 60° C
PCM-9365EZ2GS3A1E	Intel E3825 1.33GHz 6W	2GB	48-bit	Yes	2	Yes	1	3	1	5	1	Full-size	Full-size	Yes	2x2pin	Passive	-40~85° C
PCM-9365NZ24GS8A1E	Intel N2930 1.83GHz 7.5W	4GB	48-bit	Yes	2	Yes	1	3	1	5	1	Full-size	Full-size	Yes	2x2pin	Passive	-40~85° C

Note: Passive=fanless; Active=with fan

Packing List

Part No.	Description	Quantity
	PCM-9365 SBC	1
	Startup Manual	1
1701200220	RS-232 COM3/4 cable, F Cable 2*10P-2.0/D-SUB 9P(M)*2 22CM	1
1700018785	SATA 35cm power cable	1
1700019414	RS-232 COM2 Cable D-SUB 9P(M)/2*5P-2.0 30cm	1
1700018730	USB Cable 2*5P-2.0/USB-A(F)*2 25CM F/9	2
1700008941	M Cable SATA 7P/SATA 7P 32CM C=R 180/180D W/Lock	1
1700019584	Audio Cable 2*5P-2.0/JACK*3 20cm	1
9689000002	mini Jumper pack	1
1960067897T001	Heatsink for PCM-9365 (131.24 x 69.21 x 19.5 mm)	1
1960067897T011	Heatsink for PCM-9365Z&Z2 series only (131.24 x 69.21 x 19.5 mm)	1

Rear I/O View



Optional Accessories

Part No.	Description
1960070254T001	Heat spreader
1653130421	PCI-104 connector 120-pin (Long pin)

Embedded OS/API

Embedded OS/API	Part No.	Description
WES8	TBD	
WES7	2070013531	WES7E PCM-9365 X64 V5.6.8 Eng
WEC7	TBD	
Linux		Kernel 3.x
VxWorks		6.9.3.3
Android		Kit Kat 4.4
Software API		iManager (SUSI 4.0)

Our company network supports you worldwide with offices in Germany, Austria, Switzerland, Great Britain and the USA. For more information please contact:

Headquarters

Germany



FORTEC Elektronik AG
Lechwiesenstr. 9
86899 Landsberg am Lech

Phone: +49 8191 91172-0
E-Mail: sales@forteca.de
Internet: www.forteca.de

Fortec Group Members

Austria



FORTEC Elektronik AG
Office Vienna

Nuschinggasse 12
1230 Wien

Phone: +43 1 8673492-0
E-Mail: office@fortec.at
Internet: www.fortec.at

Germany



Distec GmbH

Augsburger Str. 2b
82110 Germering

Phone: +49 89 894363-0
E-Mail: info@distec.de
Internet: www.distec.de

Switzerland



ALTRAC AG

Bahnhofstraße 3
5436 Würenlos

Phone: +41 44 7446111
E-Mail: info@altrac.ch
Internet: www.altrac.ch

United Kingdom



Display Technology Ltd.

5 The Oaks Business Village
Revenge Road, Lordswood
Chatham, Kent, ME5 8LF

Phone: +44 1634 672755
E-Mail: info@displaytechnology.co.uk
Internet: www.displaytechnology.co.uk

USA



Apollo Display Technologies, Corp.

87 Raynor Avenue,
Unit 1 Ronkonkoma,
NY 11779

Phone: +1 631 5804360
E-Mail: info@apolloDisplays.com
Internet: www.apolloDisplays.com