

PCM-3365

Intel® Atom™ E3825 / E3845 & Celeron® N2930,
PC/104-Plus SBC



SUSIAccess CE FCC

Features

- Intel® Atom™ E3825/E3845 & Celeron® N2930
- DDR3L-1066/1333MHz SODIMM up to 8GB
- 3 independent display: VGA+LVDS+HDMI/DVI
- Support PC/104-Plus expansion
- Rich I/O: 1 GbE, 3 COM, SATA, 6 USB2.0, full-size mSATA/miniPCIE
- Supports SUSIAccess and Embedded Software APIs

Software APIs:



Utilities:

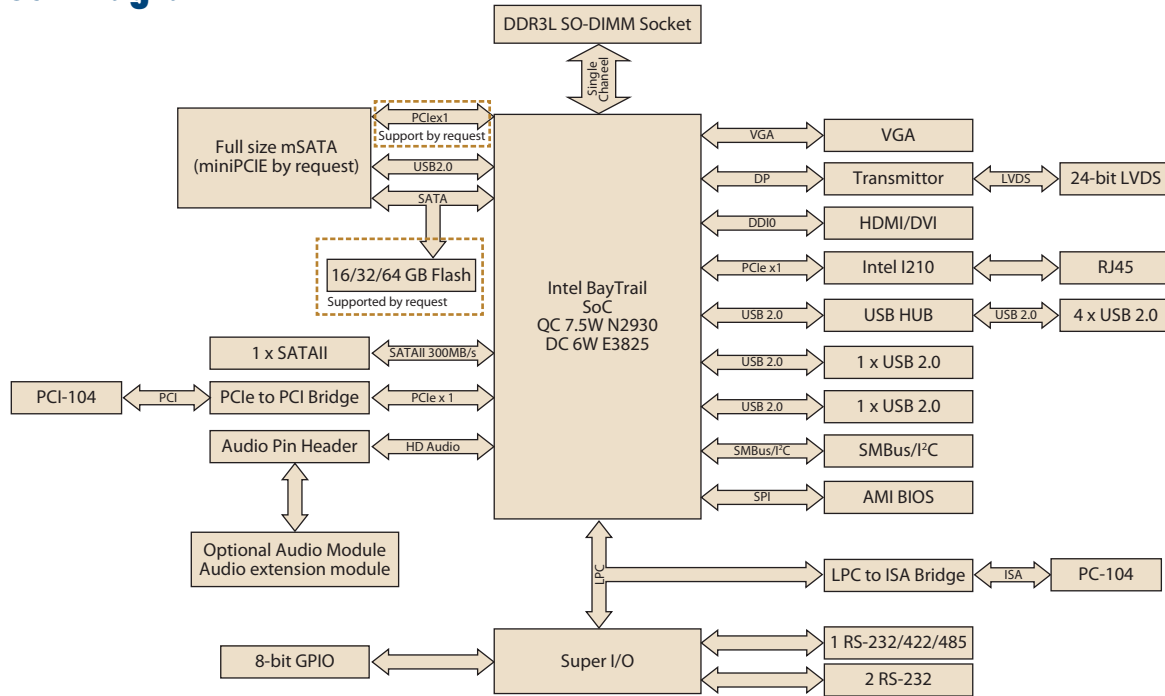


Specifications

Processor System	CPU	Intel Celeron N2930	Intel Atom E3825	Intel Atom E3845
	Base Frequency	1.83 GHz (Quad-Core)	1.33 GHz (Dual-Core)	1.91 GHz (Quad-Core)
	Max Turbo Frequency	2.16 GHz	-	-
	L2 Cache	2MB	1MB	2MB
	BIOS	AMI UEFI BIOS at 64 Mb		
Memory	Technology	DDR3L 1333 MHz	DDR3L 1066 MHz	DDR3L 1333 MHz
	Max. Capacity	8 GB		
	Socket	1 x 204-pin SODIMM		
Display	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 / DVI	24-bit LVDS up to WUXGA 1920 x 1200 at 60Hz		
	Multit-Display	Supports single channel 24-bit LVDS up to 1440 x 900 at 60Hz		
Ethernet	Speed	HDMI 1.4a for HD video playback, 1080P at 60Hz, up to 1920 x 1080		
	Controller	DVI 1.0 (DVI-D), up to 1920 x 1080		
	Connector	(Cable is optional)		
Storage	Speed	VGA + LVDS, VGA + HDMI/DVI, HDMI/DVI + LVDS		
	mSATA	10/100/1000Mbps		
	Onboard Flash*	Intel I210		
Internal I/O	Serial	Pin Header		
	USB2.0	Output System reset, Programmable counter from 1 ~ 255 minutes/ seconds		
	I ² C	1, up to 3Gb/s (300 MB/s)		
	SMBus	1 x Full-size (SATA signal shared with Onboard flash)		
	GPIO	16GB/32GB/64GB		
Expansion	Mini PCIe	1 RS-232/422/485 from COM 1, 2 RS-232 from COM2/3 (ESD protection: Air gap ±15kV, Contact ±8kV)		
	PC/104	6		
	PCI-104	1 (Shared with SMBus pin)		
	Power Type	1		
Power	Power Supply Voltage	8-bit		
	Power Consumption (Typical)	0 (PCIe is supported by request)		
	Power Consumption (Max, test in HCT)	PC/104 Expansion (ISA Bus), DMA is not supported and Memory address has limitation*		
	Power Management	PCI-104 Expansion (PCI Bus)		
	Battery	AT/ATX		
Environment	Operational	Support PC104 plus power module*		
	Non-Operational	5V ± 5%		
	Dimensions (L x W)	E3825: 0.877A@+5V, 0.006A@+12V, 0.003A@+5VSB (4.472W)		
Physical Characteristics	Weight	E3845: 0.923@+5V, 0.007A@+12V, 0.004A@+5VSB (4.719W)		
	Height	N2930: 0.866A@+5V, 0.006A@+12V, 0.003A@+5VSB (4.417W)		
		E3825: 1.107A@+5V, 0.008A@+12V, 0.008A@+5VSB (5.671W)		
Physical Characteristics		E3845: 1.493@+5V, 0.008A@+12V, 0.025A@+5VSB (7.686W)		
		N2930: 1.331A@+5V, 0.009A@+12V, 0.016A@+5VSB (6.843W)		
		ACPI		
Physical Characteristics		Lithium 3 V / 210 mAH		
		0 ~ 60° C with 0.7m/s air flow (32 ~ 140° F) (Operational humidity: 40° C @ 95% RH Non-Condensing)		
		-40° C ~ 85° C and 60° C @ 95% RH Non-Condensing		
Physical Characteristics		96 x 90 mm (3.8" x 3.5")		
		0.735 kg (1.62 lb) (with heat-sink)		
		Top side: 14.4mm (N2930, E3825 standard), 19.4mm (E3845 & E3825 extend temp.); Bottom side: 7.8mm, PCB: 1.6mm		

* The specification is supported by request

Block Diagram



Ordering Information

Part No.	CPU	L2 Cache	Memory	VGA	HDMI/DVI	LVDS	USB2.0	SATA	GbE	COM	PCI-104	PC/104	Full-size mSATA	Thermal solution	Operating Temp
PCM-3365E-S3A2	E3825	1MB	SODIMM	Yes	Yes	24-bit	6	1	1	3	Yes	Yes	Yes	Passive	0 ~ 60
PCM-3365EW-S3A2	E3825	1MB	SODIMM	Yes	Yes	24-bit	6	1	1	3	Yes	Yes	Yes	Passive	-40 ~ 85
PCM-3365EW-S9A2	E3845	2MB	SODIMM	Yes	Yes	24-bit	6	1	1	3	Yes	Yes	Yes	Passive	-40 ~ 85
PCM-3365N-S8A2	N2930	2MB	SODIMM	Yes	Yes	24-bit	6	1	1	3	Yes	Yes	Yes	Passive	0 ~ 60

Packing List

PN	Description	Quantity
	PCM-3365 SBC	1
	Startup manual	1
1700002332	ATX power cable 20P-13P/8P/3P/3P 13 cm	1
1700003491	AT power cable 1 x 8P-2.0/B4P-5.08 x 2 15 cm	1
1700017863	LAN cable RJ-45/2 x 5P-2.0 15 cm	1
1700071000	SATA data cable 7p 100 cm	1
1700022749-11	SATA power cable B4P-5.08/SATA 15P 10 cm	1
1703100260	USB cable 2 ports 2.0 mm pitch w/ bracket 26 cm	3
1701200220	RS-232 x 2 ports 2.0 mm 22 cm	1
1700019414	RS-232/422/485 30cm 1 prot	1
1700000898	VGA cable D-SUB 15P(F)/12P-1.25 mm15 cm	1
9689000002	mini Jumper pack	1
1960073365T001	Heatsink for E3845 & E3825 extend temp. (77.98 x 79.66 x 17.58 mm)	1
1960071977T001	Heatsink for E3825 standard/N2930 (79.66 x 77.98 x 12 mm)	1

Optional Accessories

Part No.	Description
1960075183T001	Heat spreader of PCM-3365 (79.66 x 77.98 x 10.68 mm)
1653130421	PCI-104 connector 120-pin (Long pin)
165313222B	PC/104 connector 64-pin (Long pin)
165312022B	PC/104 connector 40-pin (Long pin)
1700025501-01	15cm DVI cable
1700025492-01	10cm HDMI cable
PCA-AUDIO-HDB1E	Audio extension module
1700025491-01	30cm audio cable connecting PCM-3365 and audio extension module

Embedded OS/API

OS/API	Part No.	Description
Win10	2070015313	Win10 IoT Ent LTSB 2016 (64b)
WES7	2070014273	WES7E x64 V5.7.0 ENG
WEC7	2070014557	WEC7 x32 V7.4 ENG (Support by request)
Software API		iManager (SUSI 4.0)