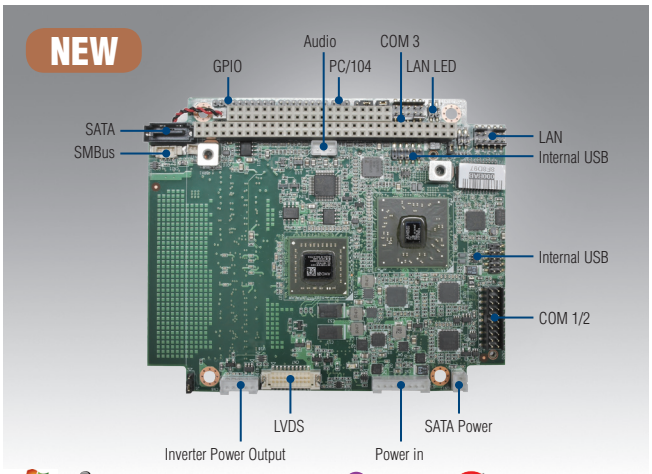
PCM-3356

AMD T16R,T40E, PC/104 SBC, VGA, LVDS, LAN, USB, COM, SATA



Features

- AMD® G-Series™ Processor T16R 615 MHz /T40E 1.0GHz
- Supports up to 4GB DDR3L SODIMM/1G DDR3L On board memory
- Supports 18-bit LVDS and VGA
- Supports 3 COM ports, 4 USB 2.0 ports, dual GbE and audio codec
- Supports extended temp: -40 ~ 85° C
- Expansion: PC/104 and half size mini PCIe
- Supports SUSIAccess and Embedded Software APIs

Software APIs: Watchdog, SMBus, H/W Monitor, GPIO, Brightness, Backlight On/Off

Utilities: BIOS flash, Monitoring

Specifications

Processor System	CPU	AMD® G-Series™ T16R	AMD® G-Series™ T40E
	Core No	1	2
	Frequency	615 MHZ	1.0 GHz
	L2 Cache	512 KB	
	System Chipset	AMD G-Series + A55E	
	BIOS	AMI 32-Mbit	
Memory	Technology	1GB DDR3L 1066 MHZ	
	Max. Capacity	On Board memory: 1G SO-DIMM: 4G	
	Recommended DRAM	AQD-SD3L4GN16-SQ	
	Socket	1 x 204-pin SODIMM	
Display	Chipset	AMD G-Series	
	Graphics Engine	DirectX 11 graphics with UVD 3.0, Open CL 1.1, Open GL 4.0 Hardware decode (UVD 3) for H.264, VC-1 and MPEG2	
	VRAM	Optimized shared memory Architecture up to 384 MB system memory	
	LVDS	Supports up to 1280 x 800 @ 18-bit LVDS	
	VGA	Supports up to 1920 x 1200 at 85Hz	
	Dual Display	LVDS + VGA	
Ethernet	Interface	10/100/1000 Mbps	
	Controller	LAN1: Realtek RTL8111E-VB-GR LAN2: Realtek RTL8111E-VB-GR	
	Connector	Box header	
Audio	Chipset	Realtek ALC892, High Definition Audio (HD), Line out	
WatchDog Timer		Output System reset, Programmable 1 ~ 255 sec	
Internal I/O	SATA	1 x SATA 2.0	
	mSATA	1 (Half size)	
	USB	4 x USB 2.0	
	Seriel	3 x RS-232/422/485 with auto flow control (ESD protection: Air gap ±15kV, Contact ±8kV)	
	SMBUS	1	
	GPIO	8-bit GPIO	
Expansion	PC/104 Slot	1	
	Mini PCI Express	1 (Half size)	
Power	Power Type	AT/ATX	
	Power Supply Voltage	5V only to boot up (12 V is optional for LCD inverter and add on card)	
	Power Consumption (Typical)	T16R: 1.17 A @ +5 V (5.85 W) T40E: 1.22 A @ +5 V (6.10 W) *Tested by Windows XPE. Test result may be effected by different OS.	
	Power Consumption (Max, test in)	T16R: 1.43 A @ +5 V (7.15 W) T40E: 1.77 A @ +5 V (8.85 W) *Tested by Windows XPE. Test result may be effected by different OS.	
	Power Management	ACPI 4.0	
	Battery	Lithium 3 V / 210 mAH	
Environment	Operation	0 ~ 60° C (32 ~ 140° F) (Operational humidity: 40° C @ 85% RH non-condensing)	
	Non-Operation	-40° C ~ 85° C and 60° C @ 95% RH non-condensing	
Physical Characteristics	Dimensions (L x W)	96 x 115 mm (3.8" x 4.5")	
	Weight	0.590 kg (1.30 lb)	
	Height	Top side:19.5 mm (F), Bottom side:10.6 mm	

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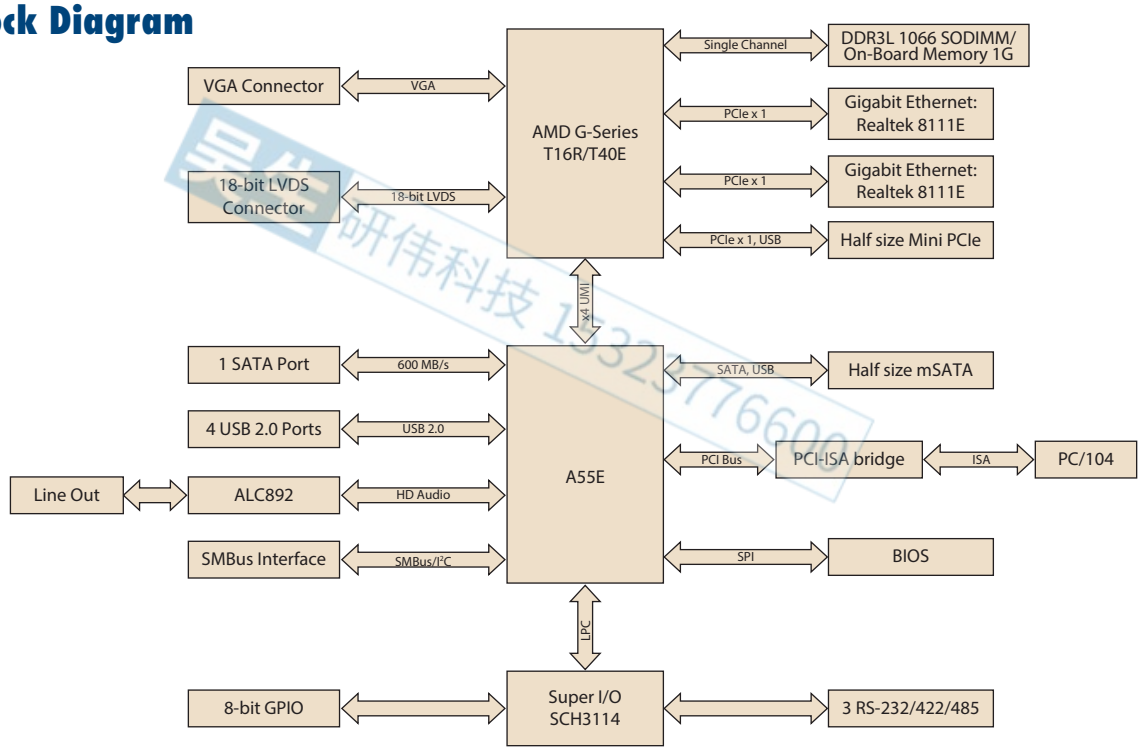
All product specifications are subject to change without notice.

Block Diagram



Ordering Information

Part Number	CPU	Chipset	Memory	VGA	LVDS	mSATA	PC/104	GbE	USB 2.0	RS-232/ 422/485	Audio	Expansion	Thermal Solution	Operating Temp
PCM-3356F-S0A2E	T40E	A55E	SO-DIMM	1	18-bit	1	Yes	2	4	3	Yes	PC/104	Passive	0 ~ 60° C
PCM-3356F-1GM0A2E	T16R	A55E	1GB DDR3L on board	1	18-bit	1	Yes	2	4	3	Yes	PC/104	Passive	0 ~ 60° C
PCM-3356F-M0A2E	T16R	A55E	SO-DIMM	1	18-bit	1	Yes	2	4	3	Yes	PC/104	Passive	0 ~ 60° C
PCM-3356Z2-2GM0A2E	T16R	A55E	2GB Bundle	1	18-bit	1	Yes	2	4	3	Yes	PC/104	Passive	-40 ~ 85° C
PCM-3356FZ21G0BA2E	T16R	A55E	1GB DDR3L on board	1	18-bit	1	Yes	2	4	3	Yes	PC/104	Passive	-40 ~ 85° C

* Extended temperature SKU did not support 3D function

Packing List

Part No.	Description	Quantity
	PCM-3356 SBC	
	Startup Manual	
1700018799	M Cable SATA 7P/SATA 7P 90/180 25cm	1
1700000898	VGA cable D-SUB 15P(F)/12P-1.25MM 14CM x1	1
1703100121	2*5P-2.0/USB-A(F)*2 12CM x2	2
1701200220	COM RS-232 Cable 2*10P-2.0/D-SUB 9P(M)*1 22CM x1	1
1700019414	COM RS-422/485 Cable 2*5P-2.0/D-SUB 30CM x1	1
1700003491	ATX/AT power cable 1*8P-2.0/B4P-5.08*2 15cm x1	1
1700018259	SATA power cable for 5V connector, 1*5P-3.81/1*2P-2.0 20CM C=R,B	1
1700020638-01	Audio cable 1*3P-2.0/Phone JACK 20cm x1	1
1700017863	LAN cable RJ45/2*5P-2.0 15cm x2	2
1960058627T001	Heatsink for PCM-3356 (105 x 77.97 x 19.5 mm) for T40E/extend temperature SKU	1
9689000002	mini jumper pack (black) x1	1
9660104000	PC/104 screw and copper post package x1	1
1960069974T001	Heat sink A-T16R M-10.4W 105*78*10-SC PCM-3356A2 for T16R	1

Optional Accessories

Part No.	Description
165313222B	PC/104 connector 64-pin (Long pin)
165312022B	PC/104 connector 40-pin (Long pin)
1703150102	SATA Power cable B4P-5.08/SATA 15P 10cm x1
1960067501N001	Heat Spreader A-T56N M-23.9W 105x62.8x15.73-SC

Embedded OS/API

Embedded OS/API	Part No.	Description
WES7	2070012057	image WES7E PCM-3356 V5.1.5
Win XPE	2070012056	image WES2009 PCM-3356 V4.4 24MUI; SA
WinCE 6.0		WinCE 6.0
WinCE 7.0	2070012240	image WEC7 PCM-3356 V1.0 Eng
Linux		Ubuntu 12.04
Software API		SUSI V3.0