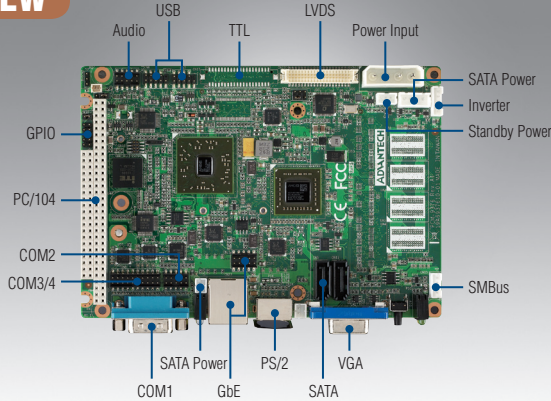


PCM-9376

**AMD G-Series T40E/T16R 3.5" SBC,
DDR3/DDR3L SODIMM/on-board SDRAM,
PC/104, 48-bit LVDS, VGA, 24-bit TTL,
2GbE, Mini PCIe, mSATA, LPC, iManager**

NEW



iManager susiAccess   

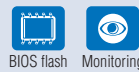
Features

- AMD G-Series Dual Core T40E and Single Core T16R processor + A55E, DDR3/DDR3L SODIMM up to 4GB
- DirectX11 supported. 48-bit LVDS, VGA, 24-bit TTL
- Dual GbE, 4 COM, 2 SATA, mSATA
- Expansion: PC/104, Mini PCIe, LPC connector for additional COM ports
- iManager, SUSIAccess and Embedded software APIs supported

Software APIs:



Utilities:



Specifications

		AMD® G-Series™ T40E	AMD® G-Series™ T16R
Processor System	CPU	AMD® G-Series™ T40E	AMD® G-Series™ T16R
	Frequency	1.0GHz (dual-core)	615MHz (single-core)
	L2 Cache	512 KB	
	System Chipset	AMD T40E/T16R + A55E	
	BIOS	AMI 32-Mbit	
Memory	Technology	DDR3/DDR3L 1066 MHz	
	Max. Capacity	SODIMM up to 4 GB	
	Socket	1 x 204-pin SODIMM	
	On-board SDRAM	1 GB	
Display	Chipset	AMD T40E/T16R processor	
	Graphic 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	48-bit LVDS up to 1920 x 1200 at 60Hz (PCM-9376E)	
	VGA	Up to 1920 x 1200 at 85Hz	
	TTL	24-bit TTL (PCM-9376F)	
	Dual Display	VGA+LVDS, VGA+TTL, LVDS+TTL	
Ethernet	Speed	10/100/1000 Mbps	
	Controller	GbE1/2: Realtek RTL8111E-VL-CG	
	Connector	GbE1 on RJ-45, GbE2 on box wafer	
Audio	Chipset	ALC892 Codec (Line-in, line-out, mic-in)	
WatchDog Timer		255 levels timer interval, programmable by software, multi-level WDT set by iManager	
Storage	SATA	2 SATA II (Max. Data Transfer Rate 300 MB/s)	
	mSATA	1 (Full-size, Mini PCIe supported by request)	
Rear I/O	Serial	1 (COM1: RS-232/422/485, supports WoR and RS-485's auto flow control) (ESD protection: air gap ±15kV, contact ±8kV)	
	Ethernet	1	
	PS/2 KB/Mouse	1	
	VGA	1	
	Reset button	1	
Internal I/O	Ethernet	1	
	USB	4 x USB2.0	
	Serial	3 (COM2: RS-232/422/485, supports RS-485 auto flow control. COM3/4: RS-232) (ESD protection: air gap ±15kV, contact ±8kV)	
	SMBus	1	
	I²C	1 (Share with SMBus)	
	GPIO	8-bit (5V tolerance)	
Expansion	PC/104 slot	1 (8/16-bit ISA) (Booted and powered from PC/104 supports by request)	
	Mini PCIe	1 (Half-size)	
	LPC connector	1 (For support of COM ports by PCA-COM232 or PCA-COM485)	
Power	Power Type	AT/ATX	
	Power Supply Voltage	5V ±5% (12V only for LCD and PC/104)	
	Power Consumption (Typical)	T40E: 1.47A@5V (7.35W) T16R: 1.44@5V (7.2W)	
	Power Consumption (Max, test in HCT)	T40E: 2.13A@5V (10.65) T16R: 1.89A@5V (9.45)	
	Power Management	ACPI	
	Battery	Lithium 3 V / 210 mA	
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)	146 x 102 mm (5.7" x 4")	
	Weight	0.51 kg (1.12 lb) for total package	
	Total Height	23.9 mm (including of heatsink)	

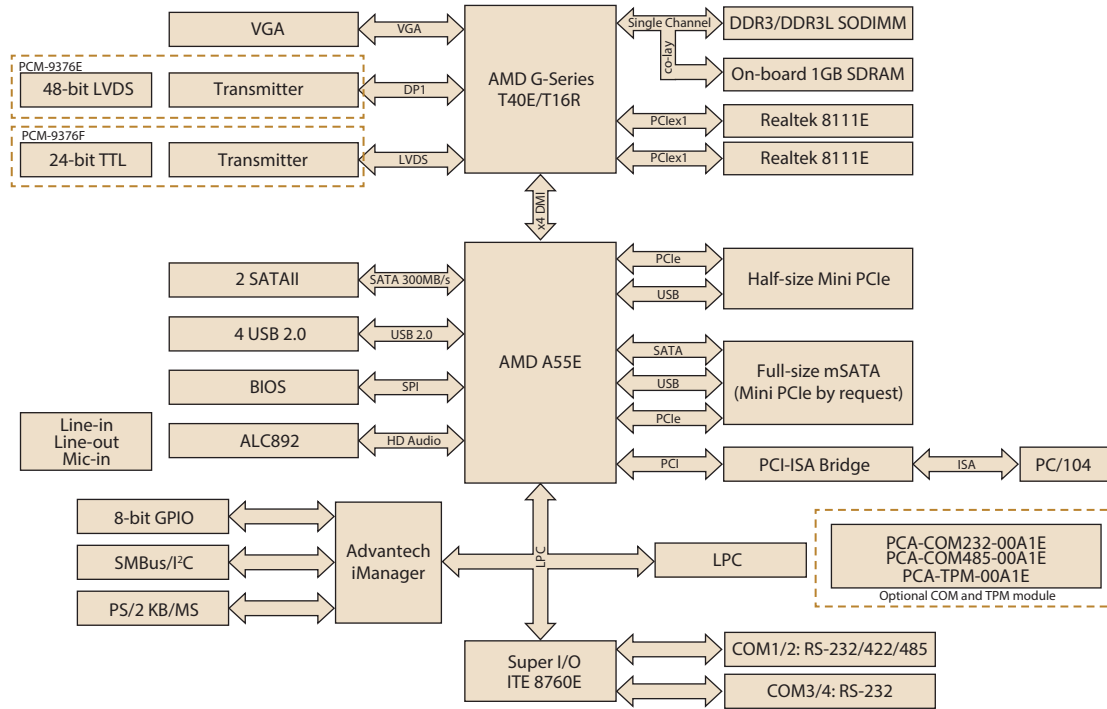
ADVANTECH

Embedded Single Board Computers

All product specifications are subject to change without notice

Last updated : 23-Nov-2015

Block Diagram



Ordering Information

Part Number	CPU	Memory	VGA	LVDS	TTL	GbE	RS-232/ 422/485	RS-232	USB2.0	SATA II	Audio	mSATA*	MiniPCle	LPC conn.	Expansion	Thermal Solution	Operating Temp
PCM-9376E-M0A1E	AMD T16R	SODIMM	1	48-bit	-	2	2	2	4	2	Yes	Full-size	Half-size	Yes	PC/104	Passive	0 ~ 60° C
PCM-9376F-M0A1E	AMD T16R	SODIMM	1	-	24-bit	2	2	2	4	2	Yes	Full-size	Half-size	Yes	PC/104	Passive	0 ~ 60° C
PCM-9376E-1GM0A1E	AMD T16R	on-board 1GB	1	48-bit	-	2	2	2	4	2	Yes	Full-size	Half-size	Yes	PC/104	Passive	0 ~ 60° C
PCM-9376E-S0A1E	AMD T40E	SODIMM	1	48-bit	-	2	2	2	4	2	Yes	Full-size	Half-size	Yes	PC/104	Passive	0 ~ 60° C
PCM-9376EZ-M0A1E	AMDT16R	SODIMM	1	48-bit	-	2	2	2	4	2	yes	Full-size	Half-size	Yes	PC/104	Passive	-20 ~ 80° C
PCM-9376EZ2-M0A1E	AMDT16R	SODIMM	1	48-bit	-	2	2	2	4	2	yes	Full-size	Half-size	Yes	PC/104	Passive	-40 ~ 85° C

* Full-size mSATA supports Mini PCIe upon request

Packing List

Part No.	Description	Quantity
	PCM-9376 SBC	
	Startup Manual	
1700019414	COM2 cable 2*5P-2.0/D-SUB, 30cm	1
1701200220	COM3/4 cable 2*10P-2.0/D-SUB*2, 22cm	1
1700017863	LAN2 cable 2*5P-2.0/RJ45, 15cm	1
1700019071	USB cable 2*5P-2.0/USB*2 w/o bracket, 12cm	1
1700008941	SATA cable 7P/7P w/ lock, 32cm	1
1700018785	5V/12V SATA Power cable 4P-2.5/SATA 15P, 35cm	1
1703100152	Audio cable 2*5P-2.0/Jack*3, 20cm	1
1700060202	PS/2 cable M-DIN 6P/M-DIN 6P*2, 20cm	1
1960071824T001	Heatsink 134 x 79 x 10.8 mm	1
9689000002	mini jumper pack	1

Optional Accessories

Part No.	Description
1703200201	ATX Power cable, 20cm
1700018259	5V SATA Power cable 2P-2.0/SATA 15P, 20cm
TBC	Heat spreader
PCA-COM232-00A1E	4 RS-232 LPC extension module, 31.5 x 48 mm
PCA-COM485-00A1E	4 RS-422/485 LPC extension module, 31.5 x 48 mm
PCA-TPM-00A1E	LPC extension TPM module, 31.5 x 48 mm

Embedded OS/API

Embedded OS/API	Part No.	Description
WES7	2070012057	image WES7E PCM-3356 V5.1.5
Win XPE	2070012321	image WES2009 PCM-9376 x86 MUI24 V4.5
WinCE 6.0		WinCE 6.0
WinCE 7.0	2070013052	WinCE 7.0
Linux		Ubuntu 12.04
Software API		iManager2.0