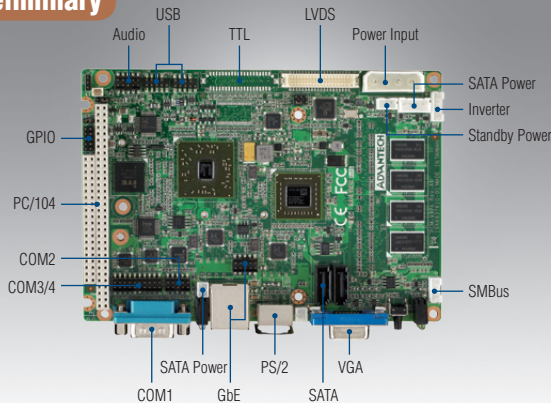


PCM-9376

AMD G-Series T16R 3.5" SBC, DDR3 SODIMM or on-board SDRAM, PC/104, 48-bit LVDS, VGA, 18-bit TTL, 2GbE, mini PCIe, mSATA, iManager

Preliminary



iManager susiAccess  **CE FCC**

Features

- AMD G-Series Single Core T16R processor + A55E, DDR3 on-board 1GB SDRAM or SODIMM up to 4GB
- DirectX11 supported. 48-bit LVDS, VGA, 18-bit TTL (optional)
- Intel 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:



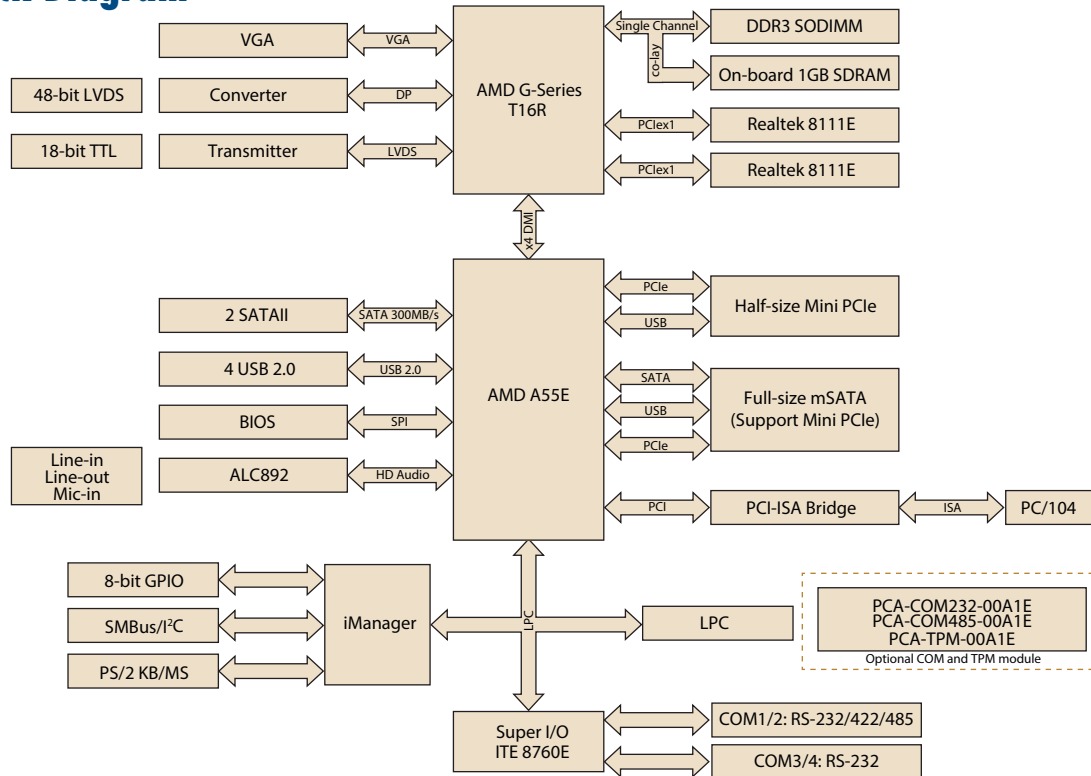
Utilities:



Specifications

| | | |
|--------------------------|--------------------------------------|---|
| Processor System | CPU | AMD® G-Series™ Single Core processor T16R |
| | Frequency | 615 MHz |
| | L2 Cache | 512 KB |
| | System Chipset | AMD T16R + A55E |
| | BIOS | AMI 32-Mbit |
| Memory | Technology | DDR3 1066 MHz |
| | Max. Capacity | SODIMM sku: up to 4GB |
| | Socket | 1 x 204-pin SODIMM |
| | On-board SDRAM | 1 GB 800 MHz |
| Display | Chipset | AMD 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 |
| | VGA | Up to 1920 x 1200 at 85Hz |
| | TTL | 18-bit TTL (by request) |
| Ethernet | Dual Display | VGA, LVDS and optional TTL (any two combination) |
| | Speed | 10/100/1000 Mbps |
| | Controller | LAN1/2: Realtek RTL8111E-VL-CG |
| Audio | Connector | LAN1 on RJ-45, LAN2 on box wafer |
| | 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, supports Mini PCIe 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 |
| | I ² C | 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) |
| Power | Power Type | AT/ATX |
| | Power Supply Voltage | 5V ±5% (12V only for LCD and PC/104) |
| | Power Consumption (Typical) | 1.48A @ 5V (7.4 W) |
| | Power Consumption (Max, test in HCT) | 2.28A @ 5V (11.4 W) |
| | Power Management | ACPI, APM |
| Environment | Battery | Lithium 3 V / 210 mAh |
| | Operation | 0 ~ 60° C (32 ~ 140° F) (Operational humidity: 40° C @ 85% RH non-condensing) |
| Physical Characteristics | Non-Operation | -40° C ~ 85° C and 60° C @ 95% RH non-condensing |
| | Dimensions (L x W) | 146 x 102 mm (5.7" x 4") |
| | Weight | 0.51 kg (1.12 lb) for total package |
| | Total Height | TBC |

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 | by request | 2 | 2 | 2 | 4 | 2 | Yes | Full-size | Half-size | Yes | PC/104 | Passive | 0 ~ 60° C |
| PCM-9376E-1GM0A1E | AMD T16R | 1GB onboard | 1 | 48-bit | by request | 2 | 2 | 2 | 4 | 2 | Yes | Full-size | Half-size | Yes | PC/104 | Passive | 0 ~ 60° C |

* Full-size mSATA supports Mini PCIe by 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 |
| TBC | Heatsink | 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 |
|-----------------|----------|---------------|
| Win XPE | | |
| WES7 | | |
| WinCE | | WEC7 CE6.0 |
| Linux | | |
| VxWorks | TBC | |