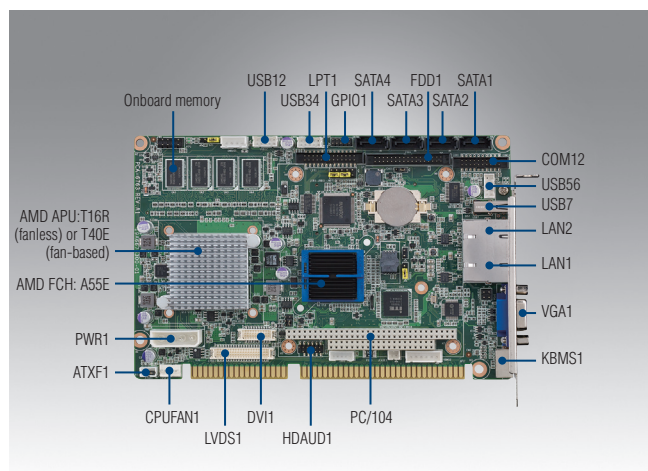


# PCA-6763

## AMD T40E/T16R ISA Half-size SBC with Dual Independent Display/Dual GbE/SATA/USB/m-SATA/COM/LPT



### Features

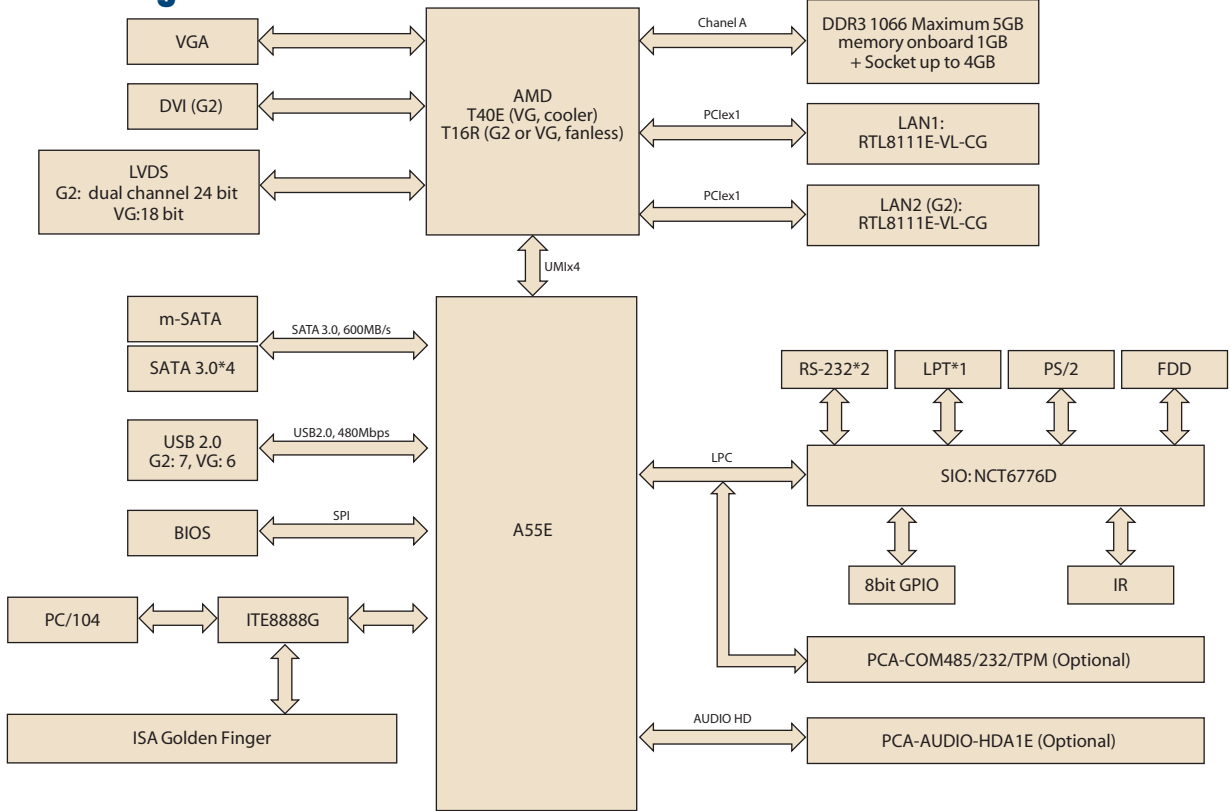
- Ultra low power, AMD dual-core Accelerated Processing Unit T40E or fanless T16R
- DDR3 1066 memory onboard 1GB+ DDR3 1066 SO-DIMM socket 4GB
- Dual independent display
- Up to 2 GbE LAN supported
- Up to 7 USB 2.0 (480 Mbps)
- 4 x SATA 3.0 (600 MB/s) and 1 m-SATA (600 MB/s)
- Legacy I/O, such as FDD/ PC/104/ COM/ LPT supported
- Optional module for 4 x RS-422/485 or 4 x RS-232, TPM and HD audio

CE FCC

### Specifications

|                   |                    |  |                       |  |       |      |     |
|-------------------|--------------------|--|-----------------------|--|-------|------|-----|
| Processor System  | CPU                | AMD G-Series APU T16R  | AMD G-Series APU T40E |  |       |      |     |
|                   | Max. Speed         | 615 MHz  | 1 GHz                 |  |       |      |     |
|                   | L2 Cache           | 512 KB   |                       |  |       |      |     |
|                   | Chipset            | AMD Fusion controller hub A55E   |                       |  |       |      |     |
|                   | BIOS               | AMI-EFI 32 Mbit SPI  |                       |  |       |      |     |
| Bus               | ISA                | Full 16-bit ISA Bus signal   |                       |  |       |      |     |
| Memory            | Technology         | DDR3 1066 1GB onboard+ DDR3 1066 up to 4GB on 1 x 204-pin SODIMM socket                                      |                       |  |       |      |     |
|                   | Controller         | AMD G-Series T16R or T40E (Integrated with AMD GPU Radeon HD 6250)   |                       |  |       |      |     |
| Graphics          | VRAM               | Optimized shared memory architecture, up to 384 MB of system memory  |                       |  |       |      |     |
|                   | Dual Display       | G2: Choosing two interface from VGA (Default), LVDS, and DVI<br>VG: VGA (Default)+LVDS                       |                       |  |       |      |     |
|                   | VGA                | Up to 1920 x 1200 @ 60Hz   |                       |  |       |      |     |
|                   | LVDS               | G2: 48 bit (Dual channel 24 bit) LVDS up to 1920 x 1200 @ 60Hz<br>VG: 18 bit LVDS up to 1024 x 768 @ 60Hz    |                       |  |       |      |     |
|                   | DVI                | Up to 1920 x 1200 @ 60Hz   |                       |  |       |      |     |
| Ethernet          | Interface          | 10/100/1000 Mbps   |                       |  |       |      |     |
|                   | Controller         | LAN1: Realtek RTL8111E-VL-CG<br>LAN2: Realtek RTL8111E-VL-CG   |                       |  |       |      |     |
|                   | Connector          | RJ-45 x 2  |                       |  |       |      |     |
| I/O Interface     | USB                | G2: USB2.0 x 7 (1 on bracket, 6 onboard)<br>VG: USB2.0 x 6 (6 onboard)                                       |                       |  |       |      |     |
|                   | SATA               | SATA 3.0 x 4   |                       |  |       |      |     |
|                   | m-SATA             | 1  |                       |  |       |      |     |
|                   | AUDIO              | HD AUDIO interface*1 for PCA-AUDIO-HDA1E (Optional)  |                       |  |       |      |     |
|                   | Serial             | RS-232 x 2 onboard<br>Optional: RS-422/485 x 4 (PCA-COM485-00A1E) or RS-232 x 4 (PCA-COM232-00A1E) on module |                       |  |       |      |     |
|                   | Parallel           | 1 (EPP/ECP/SPP)  |                       |  |       |      |     |
|                   | FDD                | 1  |                       |  |       |      |     |
|                   | GPIO               | 8 bit  |                       |  |       |      |     |
| Watchdog Timer    | PS/2               | 1 (6-pin DIN socket on bracket for PS/2 keyboard and mouse, 6-pin wafer box connector)                       |                       |  |       |      |     |
|                   | Output Interval    | System reset/IRQ11<br>Programmable, 1~255 sec/min  |                       |  |       |      |     |
| Power Requirement | Test Environment   | AMD G-series T40E (1GHz), DDR3 1066 5GB (1GB onboard and 4 GB with DIMM)                                     |                       |  |       |      |     |
|                   | Voltage            | +12V   | +5V                   | +3.3V  | +5VSB | -12V | -5V |
|                   | Current            | 0.39A  | 1.93A                 | 0A   | 0A    | 0A   | 0A  |
| Environment       | Temperature        | Operating  |                       | Non-Operating                                    |       |      |     |
|                   |                    | 0 ~ 60 °C (32 ~ 140 °F) (operating humidity: 40 °C @ 85% RH Non-Condensing)                                  |                       | -40 °C ~ 85 °C and 60 °C @ 95% RH Non-Condensing |       |      |     |
| Physical          | Dimensions (L x H) | 185 x 122 mm (7.3" x 4.8")   |                       |  |       |      |     |

### Block Diagram



### Ordering Information

| P/N              | APU  | GbE LAN | Memory                           | VGA | DVI | LVDS   | USB | SATA | COM      | LPT | PC104 | FDD | mSATA |
|------------------|------|---------|----------------------------------|-----|-----|--------|-----|------|----------|-----|-------|-----|-------|
| PCA-6763G2-00A1E | T16R | 2       | onboard 1GB+<br>Socket up to 4GB | 1   | 1   | 48 bit | 7   | 4    | 2 RS-232 | 1   | 1     | 1   | 1     |
| PCA-6763VG-00A1E | T16R | 1       | onboard 1GB+<br>Socket up to 4GB | 1   | -   | 18 bit | 6   | 4    | 2 RS-232 | 1   | 1     | 1   | 1     |
| PCA-6763VG-S0A1E | T40E | 1       | onboard 1GB+<br>Socket up to 4GB | 1   | -   | 18 bit | 6   | 4    | 2 RS-232 | 1   | 1     | 1   | 1     |

### Packing List

| Part Number    | Description  | Quantity |
|----------------|--|----------|
| 1700008762     | Dual-COM port cable kit (for G2 SKU)                                 | x 1      |
| 1700014398-11  | 4-port USB cable kit (2.0 mm pitch)                                  | x 1      |
| 1700060202     | Y cable for PS/2 keyboard, PS/2 mouse                                | x 1      |
| 1700003194     | SATA HDD data cable  | x 1      |
| 1700022749-11  | SATA HDD power cable   | x 1      |
| 1700002343     | ATX feature cable  | x1       |
| 1700002223     | LPT port cable kit (for G2 SKU)                                      | x1       |
| 1700008954     | LPT+COM cable kit (for VG SKU)                                       | x1       |
| 1960046526N001 | CPU cooler for AMD T40E APU<br>(only available for PCA-6763VG-S0A1E) | x 1      |

### Optional Accessories

| Part Number      | Description  |
|------------------|--|
| PCA-COM485-00A1E | 4 x RS-422/485 COM module                              |
| PCA-COM232-00A1E | 4 x RS-232 COM module                                  |
| PCA-AUDIO-HDB1E  | Extension module for 7.1 channel High Definition audio |
| PCA-TPM-00A1E    | Trusted platform module compliant with TCG 1.2         |
| 1700008822       | DVI cable  |
| 1701340603       | FDD cable  |

### I/O View

