

# PICO50R NEW

Pico-ITX SBC with 6th Gen Intel® Core™ i7/i5/i3 and Celeron® Processor, DisplayPort, LVDS and 2 GbE LAN

## Features

- 6th gen Intel® Core™ i7/i5/i3 and Celeron® processor
- 1 DDR4 SO-DIMM for up to 16GB of memory
- 2 GbE LAN
- M.2 Key E
- M.2 Key B
- Intel® AMT 11 supported



▲ Assembly view



## Core System

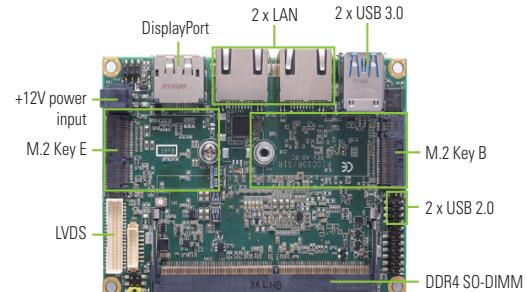
|                       |                                                                                                                                                                                                                                        |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CPU                   | 6th gen Intel® Core™ i7/i5/i3 and Celeron® processor onboard                                                                                                                                                                           |
| System Memory         | 1 x 260-pin DDR4-2133 SO-DIMM, up to 16GB                                                                                                                                                                                              |
| Chipset               | SoC integrated                                                                                                                                                                                                                         |
| BIOS                  | AMI                                                                                                                                                                                                                                    |
| SSD                   | Refer to ordering information                                                                                                                                                                                                          |
| Watchdog Timer        | 65535 levels, 1 to 65536 sec.                                                                                                                                                                                                          |
| Expansion Interface   | 1 x M.2 Key E (PCIe x1, USB 2.0 in 22x30)                                                                                                                                                                                              |
| Battery Lithium       | Lithium 3V/220 mAh                                                                                                                                                                                                                     |
| Power Input           | 2 x 2-pin connector<br>+12V DC-in only<br>AT Auto Power On function supported                                                                                                                                                          |
| Power Requirements    | Intel® i7-6600U @2.6 GHz 8GB DDR4 max. RMS. +12V@2.8A<br>Intel® i5-6300U @2.4 GHz 8GB DDR4 max. RMS. +12V@2.5A<br>Intel® i3-6100U @2.3 GHz 8GB DDR4 max. RMS. +12V@2.3A<br>Intel® Celeron® 3955U @2.0 GHz 8GB DDR4 max. RMS. +12V@1.9A |
| Dimensions            | 100 x 72 mm                                                                                                                                                                                                                            |
| Board Thickness       | 1.6 mm                                                                                                                                                                                                                                 |
| Operating Temperature | -20°C to +60°C (-4°F to 140°F)                                                                                                                                                                                                         |
| Humidity              | 10% to 95% relative humidity, non-condensing                                                                                                                                                                                           |

## I/O

|                     |                                                                                                                                                                                      |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SATA                | Refer to ordering information                                                                                                                                                        |
| Hardware Monitoring | Detect CPU/system temperature, voltage and fan speed                                                                                                                                 |
| Ethernet            | 1 x 10/100/1000 Mbps Ethernet with Intel® i219-LM;<br>supports Wake-on-LAN, PXE Boot ROM<br>1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT;<br>supports Wake-on-LAN, PXE Boot ROM |
| Audio               | Refer to ordering information                                                                                                                                                        |
| USB                 | 2 x USB 2.0<br>2 x USB 3.0                                                                                                                                                           |
| Serial              | 2 x RS-232/422/485                                                                                                                                                                   |
| TPM                 | N/A                                                                                                                                                                                  |
| SMBus               | Yes; compatible with I <sup>2</sup> C                                                                                                                                                |
| Digital I/O         | 4-channel in/out programmable                                                                                                                                                        |

## Display

|                   |                                                            |
|-------------------|------------------------------------------------------------|
| Chipset           | Intel® HD Graphics                                         |
| Memory Size       | Share system memory                                        |
| Display Interface | 1 x DisplayPort<br>1 x LVDS; 18/24-bit single/dual channel |



▲ Side view



▲ Rear view

## Packing List

| Accessories  |                       |
|--------------|-----------------------|
| 594H3160400E | Power cable, L=100 mm |

## Ordering Information

| Standard                                             |                                                          |              |                 |     |
|------------------------------------------------------|----------------------------------------------------------|--------------|-----------------|-----|
| Model                                                | SSD                                                      | SATA         | Audio           | Fan |
| PICO50RPGG-i7-6600U<br>(P/N: E38H50R100)             | 1 x M.2 Key B (SATA, USB 2.0, PCIe2 optional) in 22x42   | N/A          | N/A             | No  |
| PICO50RPGG-i5-6300U<br>(P/N: E38H50R101)             | 1 x M.2 Key B (SATA, USB 2.0, PCIe2 optional) in 22x42   | N/A          | N/A             | No  |
| PICO50RPGG-i3-6100U<br>(P/N: E38H50R102)             | 1 x M.2 Key B (SATA, USB 2.0, PCIe2 optional) in 22x42   | N/A          | N/A             | No  |
| PICO50RPGG-Celeron-3955U<br>(P/N: E38H50R103)        | 1 x M.2 Key B (SATA, USB 2.0, PCIe2 optional) in 22x42   | N/A          | N/A             | No  |
| Optional                                             |                                                          |              |                 |     |
| Model                                                | SSD                                                      | SATA         | Audio           | Fan |
| PICO50RPGG-i7-6600U w/fan<br>(P/N: E38H50R105)       | 1 x M.2 Key B (SATA, USB 2.0, PCIe x2 optional) in 22x42 | N/A          | N/A             | Yes |
| PICO50RPGG-i5-6300U w/fan<br>(P/N: E38H50R106)       | 1 x M.2 Key B (SATA, USB 2.0, PCIe x2 optional) in 22x42 | N/A          | N/A             | Yes |
| PICO50RPGG-i3-6100U w/fan<br>(P/N: E38H50R107)       | 1 x M.2 Key B (SATA, USB 2.0, PCIe x2 optional) in 22x42 | N/A          | N/A             | Yes |
| PICO50RPGG-Celeron-3955U w/fan<br>(P/N: E38H50R108)  | 1 x M.2 Key B (SATA, USB 2.0, PCIe x2 optional) in 22x42 | N/A          | N/A             | Yes |
| PICO50RPGGA-i7-6600U w/fan<br>(P/N: E38H50R109)      | N/A                                                      | 1 x SATA-600 | Mic-in/Line-out | Yes |
| PICO50RPGGA-i5-6300U w/fan<br>(P/N: E38H50R110)      | N/A                                                      | 1 x SATA-600 | Mic-in/Line-out | Yes |
| PICO50RPGGA-i3-6100U w/fan<br>(P/N: E38H50R111)      | N/A                                                      | 1 x SATA-600 | Mic-in/Line-out | Yes |
| PICO50RPGGA-Celeron-3955U w/fan<br>(P/N: E38H50R112) | N/A                                                      | 1 x SATA-600 | Mic-in/Line-out | Yes |
| 7128H51R000E                                         | Heatspreader                                             |              |                 |     |
| 594H3180400E                                         | DC power cable for adapter, L=180 mm                     |              |                 |     |
| 50966124050E                                         | Adapter 12V 60W FSP060-DHAN3 with screw                  |              |                 |     |
| 59380880250E                                         | COM port cable DB9-9x1P, P=125 mm, L=250 mm              |              |                 |     |
| 594H51R2810E                                         | USB cable 2 x 5P-cut P9 P2.0/2 x USB-4P, L=180 mm        |              |                 |     |

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