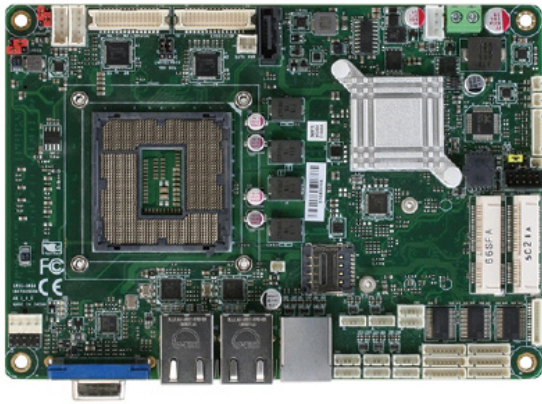


Embedded Single Board for OEM/ODM

# ONYX EPIC-KBS8

EPIC Board with 6th/7th Generation Intel® Core™ i-S series Processor (Socket Type)



## Features

- 6th/7th Generation Intel® Core™ i-S series Processor (Socket Type)
- 9-24V Wide DC Input or 12V Only (Optional), Non-ECC DDR4 SODIMM x 1 Up to 16 GB
- VGA/LVDS1/LVDS2 Display (LVDS1 Co-design with eDP, VGA with Internal and Rear Design)
- USB 3.2 Gen 1 x 2, USB 2.0 up to 10 Ports
- mSATA Half-size x 1, Mini-Card Full-size x 1 with UIM
- HDA, SATA 6.0 Gb/s x 1, GPIO x 8, COM x 6 (COM2-5 with 5V/12V/RI)
- Optional: SPK Amplifier, I2S Design



## Specifications

### System

|                       |   |
|-----------------------|---|
| Form Factor           | 4" EPIC Board   |
| CPU                   | CPU Socket Type   |
| CPU Frequency         | 6th/7th Generation Intel® Core™ i3/i5/i7/Celeron® (Support up to 54W SKU) |
| Chipset               | H110, Q170 (6W)   |
| Memory Type           | DDR4 (Non-ECC) SODIMM x 1, 2133MHz  |
| Memory Capacity       | Up to 16 GB   |
| BIOS                  | AMI   |
| Wake on LAN           | Yes   |
| Watchdog Timer        | 255 Levels  |
| Power Requirement     | 9-24V (Optional: 12V)   |
| Power Supply Type     | AT / ATX  |
| Power Consumption     | —   |
| Dimension (L x W)     | 4.53" x 6.50" (115mm x 165mm)   |
| Operating Temperature | 32°F ~ 140°F (0°C ~ 60°C)   |
| Storage Temperature   | -40°F ~ 176°F (-40°C ~ 85°C)  |
| Operating Humidity    | 0% ~ 90% relative humidity, non-condensing                                |
| MFTB (Hours)          | —   |
| Certification         | CE / FCC  |

### Display

|                           |   |
|---------------------------|---|
| VGA / LCD Controller      | 6th/7th Generation Intel® Core™ i3/i5/i7/Celeron® |
| Video Output              | VGA/LVDS1 (Optional: LVDS2/eDP)                   |
| Backlight Inverter Supply | Max. 12V, 2A                                      |

### I/O

|                |  |
|----------------|--|
| Ethernet       | LAN x 2 (Real IO)  |
| Audio          | REALTEK ALC892 (Optional: 2W Amp, I2S)                               |
| USB Port       | Rear I/O: USB 3.2 Gen 1 x 2<br>Internal: USB 2.0 x 10 (for Q170 SKU) |
| Serial Port    | COM x 6 (All internal, COM2: RS-232/422/485, COM2-5 5V/12V/RI)       |
| Parallel Port  | —  |
| HDD Interface  | SATA 3.0 x 1   |
| SSD            | mSATA x 1 (Half size, optional for Mini-card)                        |
| Expansion Slot | Mini-card x 1 (Full size)  |
| DIO            | 8-bit  |
| SIM            | Micro SIM (Optional)   |
| TPM            | —  |
| Touch          | —  |