Embedded Single Board for OEM/ODM

ONYX GENE-KBU6

3.5" SubCompact Board with 7th Generation Intel® Core™ i7/i5/i3/Celeron® Processor SoC



Features

- 7th Generation Intel® Core™ i7/i5/i3/Celeron® Processor SoC
- DDR4 1866/2133, SODIMM x 1
- DVI, 18/24-bit Dual-Channel LVDS
- 2 CH Audio
- SATA 6.0 Gb/s x 1 & mSATA (Share with Half-size Mini-Card and Selective by BIOS)
- Supports 8-bit Digital I/O, USB 2.0 x 2 , USB 3.2 Gen 1 x 4
- COM x 4 (RS-232 x 1, RS-232/422/485 x 3)
- Mini-Card Slot x 1 (Full size), TPM, SIM
- Wide DC Support 9~36V, +12V Only (Optional)
- 4/5/8-wire Resistive Touch Screen Controller
- BIO Connector for Daughter Board
- Solder Design for System Assembly and Thermal



Specifications

Form Factor	3.5" SubCompact Board
CPU	7th Generation Intel® Core™ i7-7600U Processor SoC
CPU Frequency	Up to 3.9 GHz
Chipset	7th Generation Intel® Processor SoC
Memory Type	DDR4 1866/2133, SODIMM x 1
Memory Capacity	Up to 16 GB
BIOS	UEFI
Wake on LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	+9 ~ 36V or +12V
Power Supply Type	AT / ATX
Power Consumption	Intel® i7-7600U, DDR4
(Typical)	2400MHz 16GB, 1.85A@ +12V
Dimension (L x W)	5.75" x 4" (146 mm x 101.7 mm)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 81°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MFTB (Hours)	123,000
Certification	CE / FCC
Display	
VGA / LCD Controller	7th Generation Intel® Processor SoC
Video Output	DVI-D, LVDS, DP (Default) DVI-I, LVDS (include VGA signal)
Backlight Inverter Supply	Yes
I/O	
Ethernet	Intel® i210/i211, 10/100/1000Base-TX, RJ-45 x 2
Audio	High Definition Audio Interface
USB Port	USB 3.2 Gen 1 x 4, USB 2.0 x 2
Serial Port	RS-232 x 1, RS-232/422/485 x 3
Parallel Port	_
HDD Interface	SATA 3.0 x 1, +5V SATA power connector x 1
FDD Interface	-
SSD	mSATA (Shared with half-size MiniCard and Selected by BIOS)
Expansion Slot	BIO x 1, Mini-Card x 2 and default is mSATA x 1 (Half-size) Mini-Card x 1 (Full-size)
DIO	8-bit
SIM	x 1
TPM	TPM 2.0 x 1
Touch	x 1

