Embedded Board

DDR4 on-board memory (optional) PCIe Mini (with mSATA support) RS-232/422/485 LVDS iDP DDR4 memory slot PCIe Mini (with SIM card slot)

Specifications

♦ CPU

7th generation Intel® mobile ULT processor Intel® Core™ i7-7600U (up to 3.9GHz, dual-core, 4MB cache, TDP=15W) Intel® Core™ i5-7300U (up to 3.5GHz, dual-core, 3MB cache, TDP=15W) Intel® Core ™ i3-71000 (up to 2.46Hz, dual-core, 3MB cache, TDP=15W) Intel® Core™ i3-7100U (up to 2.46Hz, dual-core, 3MB cache, TDP=15W) 6th generation Intel® mobile ULT processor Intel® Core™ i7-6600U (up to 3.4GHz, dual-core, 4MB cache, TDP=15W) Intel® Core™ i5-6300U (up to 3.45Hz, dual-core, 3MB cache, TDP=15W) Intel® Core™ i5-6300U (up to 3.05Hz, dual-core, 3MB cache, TDP=15W) Intel® Core™ i3-6100U (up to 2.35Hz, dual-core, 3MB cache, TDP=15W)

Intel® Celeron® processor 3955U (up to 2.0GHz, dual-core, 2MB cache, TDP=15W) Intel® Celeron® processor 3855U (up to 1.6GHz, dual-core, 2MB cache, TDP=15W) ♦ BIOS

- AMI UEFI BIOS
- Memory
- 1 x 260-pin 2133MHz DDR4 SDRAM SO-DIMM (channel 1, supports up to 16GB) On-board 4GB DDR4 memory (channel 2, optional support by request)
- Graphics Engine
- Intel® HD Graphics
- Display Output Triple independent display
 - 1 x VGA (up to 1920x1200@60Hz)
 - 1 x HDMI (up to 4096x2160@30Hz)
 - 1 x 18/24-bit dual-channel LVDS (up to 1920x1200@60Hz)
 - 1 x iDP interface for HDMI, LVDS, VGA, DVI, DP (co-layout with VGA)
- Ethernet
- 1 x Intel® I219LM
- 1 x Intel® I211AT
- External I/O Interface
 4 x USB 3.2 Gen 1 (5Gb/s)
- ♦ Internal I/O Interface
- 1 x SATA 6Gb/s with 5V SATA power connector
- 2 x USB 2.0 (2x4 pin, P=2.0)
- 2 x RS-232/422/485 (1x9 pin, P=1.25)
- ♦ SMBus 1 x SMBus (1x4 pin, P=2.0)
- Audio
- 1 x HD audio (2x5 pin, supports 7.1-channel HD audio by AC-KIT-892HD-R10)
- Front Panel
- 1 x Power LED & HDD LED (1x6 pin)
- 1 x Power button (1x2 pin) 1 x Reset button (1x2 pin)
- Expansion
- 1 x Full-size PCIe Mini slot (w/ SATA signal, supports mSATA)
- 1 x Full-size PCIe Mini slot (w/ SIM card slot support) *3855U belongs to Skylake ULT Base series which supports PCIe Gen 2 signal only. Digital I/O
- 1 x 8-bit digital I/O (2x5 pin) Fan Connector
- 1 x System fan connector (1x4 pin)
- Watchdog Timer
- Software programmable, supports 1~255 sec. system reset
- Power Supply 12V only DC input
- 1 x Internal power connector (2x2 pin, or optional terminal block)
- Power Consumption
- 12V@4.27A (Intel® Core™ i7-6600U up to 3.4GHz CPU with 16GB 2133MHz DDR4 memory running in 3.0GHz)
- ♦ Operating Temperature: -20°C ~ 60°C
- ♦ Storage Temperature: -30°C ~ 70°C
- ♦ Operating Humidity: 5% ~ 95%, non-condensing
- Dimensions: 146mm x 102mm ♦ Weight: GW: 600g / NW: 250g
- ◆ CE/FCC compliant

3.5" SBC supports Intel® 6th/7th Generation ULT Processor with DDR4 SO-DIMM/On-board Memory Support, Triple Display, PCIe Mini with SIM Card Slot/mSATA Support, SATA 6Gb/s, COM, Audio, and RoHS

Passenger information system for transportation



Features

- 3.5" SBC with Intel® 6th/7th Generation ULT processor supports DDR4 SO-DIMM (on-board memory support by request)
- Triple display with VGA/iDP, HDMI and LVDS selection
- Two PCIe Mini with mSATA/SIM card slot support
- Intel® GbE LAN with Intel® AMT 11.0 supported

Packing List

1 x WAFER-ULT3/ULT4 single board computer (heat spreader by default)	
1 x Power cable	1 x SATA with power cable kit
1 x RS-232/422/485 cable	1 x QIG

Ordering Information

Part No.	Description
WAFER-ULT3-i7-R10	3.5" SBC supports Intel® 6th Generation ULT Core ™ i7- 6600U processor with DDR4 SO-DIMM, triple display with VGA/iDP, HDMI, LVDS, Dual GbE, PCIe Mini with SIM card slot/mSATA support, SATA 6Gb/s, COM and RoHS
WAFER-ULT3-i5-R10	3.5" SBC supports Intel® 6th Generation ULT Core™ i5- 6300U processor with DDR4 SO-DIMM, triple display with VGA/iDP, HDMI, LVDS, Dual GbE, PCIe Mini with SIM card slot/mSATA support, SATA 6Gb/s, COM and ROHS
WAFER-ULT3-i3-R10	3.5" SBC supports Intel® 6th Generation ULT Core™ i3- 6100U processor with DDR4 SO-DIMM, triple display with VGA/iDP, HDMI, LVDS, Dual GbE, PCIe Mini with SIM card slot/mSATA support, SATA 6Gb/s, COM and ROHS
WAFER-ULT3-C-R10	3.5" SBC supports Intel® 6th Generation ULT Celeron® 3955U processor with DDR4 SO-DIMM, triple display with VGA/iDP, HDMI, LVDS, Dual GbE, PCIe Mini with SIM card slot/mSATA support, SATA 6Gb/s, COM and RoHS
WAFER-ULT3-CE-R10	3.5" SBC supports Intel® 6th Generation ULT Celeron® 3855U processor with DDR4 SO-DIMM, triple display with VGA/iDP, HDMI, LVDS, Dual GbE, PCIe Mini with SIM card slot/mSATA support, SATA 6Gb/s, COM and RoHS
WAFER-ULT4-i7-R10**	3.5" SBC supports Intel® 7th Generation ULT Core ™ i7- 7600U processor with DDR4 SO-DIMM, triple display with VGA/iDP, HDMI, LVDS, Dual GbE, PCIe Mini with SIM card slot/mSATA support, SATA 6Gb/s, COM and RoHS
WAFER-ULT4-i5-R10	3.5" SBC supports Intel® 7th Generation ULT Core ™ i5- 7300U processor with DDR4 SO-DIMM, triple display with VGA/iDP, HDMI, LVDS, Dual GbE, PCIe Mini with SIM card slot/mSATA support, SATA 6Gb/s, COM and RoHS
WAFER-ULT4-i3-R10**	3.5" SBC supports Intel® 7th Generation ULT Core ™ i3- 7100U processor with DDR4 SO-DIMM, triple display with VGA/iDP, HDMI, LVDS, Dual GbE, PCIe Mini with SIM card slot/mSATA support, SATA 6Gb/s, COM and RoHS
32001-008600-200-RS	Dual-port USB 2.0 cable, 210mm, P=2.0
32005-003500-200-RS	RS-232/422/485 cable, 250mm, P=1.25
34000-000673-RS	Optional fanless heatsink module, 146mm x 102mm x 16mm

**By order production, MOQ:100