

# tKINO-ULT3

Thin Mini-ITX SBC supports Intel® Skylake-U Processor



## Features

- » Mini ITX form factor with Intel® Skylake-U processor support DDR4-2133 memory
- » Wide range 9~36V DC Input
- » Support dual HDMI™ (one HDMI™/DP combo support), LVDS/eDP
- » Intel® GbE LAN with Intel® AMT 11.0 supported
- » SATA 6Gb/s, mSATA and eMMC 5.0 (option) supported
- » High speed I/O for USB 3.0, PCIe x4, full-size PCIe mini support

## Specifications

System	
CPU	6th generation Intel® mobile ULT on-board processor
	Intel® Core™ i7-6600U (up to 3.4GHz, dual-core, 4M Cache, TDP=15W)
	Intel® Core™ i5-6300U (up to 3.0GHz, dual-core, 3M Cache, TDP=15W)
	Intel® Core™ i3-6100U (up to 2.3GHz, dual-core, 3M Cache, TDP=15W)
	Intel® Celeron® 3955U (up to 2.0GHz, dual-core, 2M Cache, TDP=15W)
	Intel® Celeron® 3855U (up to 1.6GHz, dual-core, 2M Cache, TDP=15W)
Memory	2 x SO-DIMM DDR4 2133MHz
Memory Max.	32GB
Physical Characteristics	
Dimensions (LxWxH) (mm)	170 X 170
Net Weight	375
Storage	
Storage	2 x SATA Lwith 5V output (RAID 0/1 supported)
	1 x mSATA
	1 x eMMC :5.0 (optional, up to 32GB)
I/O Interface	
Display Output	1 x HDMI™
	1 x LVDS Single/Dual channel 18/24-bit (up to 1920x1200@60Hz) (select by switch)
	1 x eDP 4 lane (up to 4096x2304@60Hz) (select by switch)
Ethernet	2 x LAN :1 x Intel® I219LM (with Intel® AMT11.0 support), 1 x Intel® I211AT PCIe controller with NCSI support
Audio	Description: Realtek ALC662 HD Audio Codec support 5.1 Channel
	1 x Line out
	1 x Mic
	1 x Front Audio :2x5 pin
I/O Interface	4 x Internal RS-232 :2x5 pin, P=2.0
	2 x Internal RS-232/422/485 :2x5 pin, P=2.0
	4 x Internal USB 2.0 :2x4 pin, P=2.0
Expansion	1 x PCIe x4
	2 x PCIe mini Card Slot :1 x support mSATA, colay SATA2, 1 x with SIM holder
Power	
Power Consumption	12V@4.68A (Intel® Core™ i7-6600U up to3.4GHz CPU with 16GB (8GB x 2) DDR4-2133 memory running in 3.2GHz)

Power Supply	9~36V DC input, 1 x Internal power connector (2x2 pin), 1 x External DC power Jackc (Ø5.5mm)
Environment	
Operating Temperature	-20°C ~ 60°C
Humidity	5% ~ 95%, non-condensing
Certifications	
Safety & EMC	CE/FCC compliant

## Ordering Information

tKINO-ULT3-i7-R10	Thin Mini-ITX SBC supports Intel® 6th Generation Mobile Core™ i7-6600U (15W) on-board Processor (ULT), 9~36V DC input, Dual HDMI™, LVDS, eDP, SATA 6 Gb/s, Dual Intel®GbE, USB3.0, Mini PCIe, eMMC 5.0, HD audio and RoHS
tKINO-ULT3-i5-R10	Thin Mini-ITX SBC supports Intel® 6th Generation Mobile Core™ i5-6300U (15W) on-board Processor (ULT), 9~36V DC input, Dual HDMI™, LVDS, eDP, SATA 6 Gb/s, Dual Intel®GbE, USB3.0, Mini PCIe, eMMC 5.0, HD audio and RoHS
tKINO-ULT3-i3-R10	Thin Mini-ITX SBC supports Intel® 6th Generation Mobile Core™ i3-6100U (15W) on-board Processor (ULT), 9~36V DC input, Dual HDMI™, LVDS, eDP, SATA 6 Gb/s, Dual Intel®GbE, USB3.0, Mini PCIe, eMMC 5.0, HD audio and RoHS
tKINO-ULT3-CE-R10	Thin Mini-ITX SBC supports Intel® 6th Generation Mobile Celeron® 3855U (15W) on-board Processor (ULT), 9~36V DC input, Dual HDMI™, LVDS, eDP, SATA 6 Gb/s, Dual Intel®GbE, USB3.0, Mini PCIe, eMMC 5.0, HD audio and RoHS
tKINO-ULT3-C-R10	Thin Mini-ITX SBC supports Intel® 6th Generation Mobile Celeron® 3955U (15W) on-board Processor (ULT), 9~36V DC input, Dual HDMI™, LVDS, eDP, SATA 6 Gb/s, Dual Intel®GbE, USB3.0, Mini PCIe, eMMC 5.0, HD audio and RoHS

## Packing List

1 x tKINO-ULT3 single board computer with CPU cooler	2 x SATA cable
1 x I/O shielding	1 x QIG