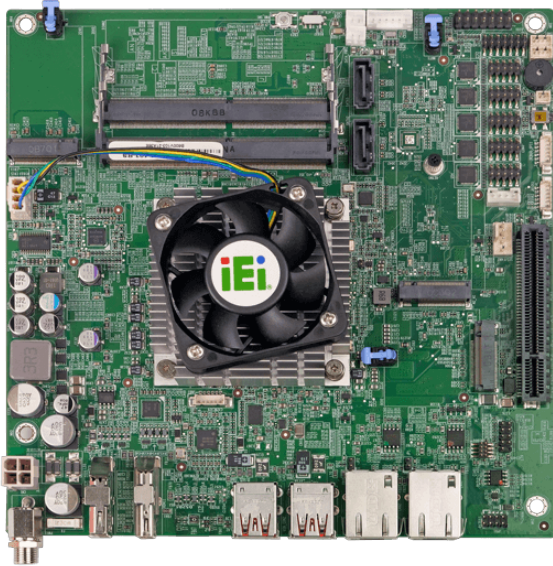


# KINO-TGL-U

Thin Mini-ITX SBC supports Intel® Tiger Lake-UP3 Processor, 9 ~ 36V DC input, triple independent displays, HDMI™, DP, iDPM, SATA 6Gb/s, Dual Intel® 2.5GbE, USB 3.2 Gen2, M.2 and RoHS



## Features

1. Mini-ITX SBC supports Intel® Tiger Lake-UP3, with Intel® 11th Gen. Core™ i7-1185G7E, i5-1145G7E, i3-1115G4E, Celeron® 6305 processor
2. Support Triple independent display via HDMI™, DP, iDPM
3. Support Dual Intel® 2.5 GbE LAN
4. Support one PCIe Gen4 x 8 slot (x 4 signal), M.2 A key, M.2 M key expansions

## Specifications

System	
CPU	11th Gen. Intel® Tiger Lake-UP3 Processor
	Intel® Core™ i7-1185G7E (up to 4.4GHz, quad-core, 12M Cache, TDP=28/15/12W)
	Intel® Core™ i5-1145G7E (up to 4.1GHz, quad-core, 8M Cache, TDP=28/15/12W)
	Intel® Core™ i3-1115G4E (up to 3.9GHz, quad-core, 6M Cache, TDP=28/15/12W)
	Intel® Celeron® 6305E (up to 1.8GHz, dual-core, 4M Cache, TDP=15W)
Memory	2 x 260-pin 3200 MHz DDR4 SO-DIMM support up to 64 GB
Memory Max.	up to 64GB
Cooling method / System Fan	1 x CPU fan connector (1x4 pin)
	1 x System fan connector (1x4 pin)
Storage	
Storage	2 x SATA : 6Gb/s with 5V SATA power connector
	1 x M.2(NGFF) : M Key (2242/2280) with PCIe Gen3 x2, support NVME storage
I/O Interface	
Display Output	1 x HDMI™ : up to 4096 x 2160@30Hz
	1 x Display Port : up to 4096 x 2160@60Hz
	1 x iDPM : IEI iDPM 3040 slot (only for IEI eDP/LVDS/VGA module)
Ethernet	2 x LAN -
	LAN1: Intel® I225V 2.5GbE controller
	LAN2: Intel® I225V 2.5GbE controller
Audio	1 x HD Audio : 1 x iAUDIO, support IEI AC-KIT-888S Audio Module (2 x 5 pin)
I/O Interface	5 x Internal RS-232 : 2x5 pin, P=2.0
	1 x Internal RS-422/485 : 2x5 pin, P=2.00, RS-485 support AFC
	2 x Internal USB 2.0 : 2x4 pin, P=2.00
	1 x DIO : 12-bit digital I/O (2x7 pin)
	4 x External USB 3.2 Gen2x1 : 10Gb/s
Expansion	1 x PCIe x8 : x 4 signal
	2 x M.2(NGFF) -
	1 x M.2 A key (2230) with PCIe Gen3 x1/USB 2.0
	1 x M.2 M key (2280/2242) with PCIe Gen3 x2

Other Features	
TPM	Intel® PTT(TPM 2.0)
Power	
Power Consumption	9V@9.19A, 12V@7.768A, 28V@3.119A, 36V@2.459A (Intel® Core™ i7-1185G7E CPU with one 8 GB 2933 MHz DDR4 SO-DIMM)
Power Supply	9 ~ 36V DC input
	1 x Internal power connector (2x2 pin)
	1 x External DC power Jackc (Ø5.5mm)
	ErP/EuP Compliant
Environment	
Operating Temperature	0°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Humidity	5% ~ 95%, non-condensing
Certifications	
Safety & EMC	CE/FCC compliant

## Ordering Information

KINO-TGL-U-i7-R10	Mini-ITX SBC with Intel® Tiger Lake-UP3 Core™ i7-1185G7E Processor,DDR4 SO-DIMM,9~36V DC input,Quad Display,SATA,Dual Intel® 2.5GbE,USB3.2,M.2,SoC,RoHS
KINO-TGL-U-i5-R10	Mini-ITX SBC with Intel® Tiger Lake-UP3 Core™ i5-1145G7E Processor,DDR4 SO-DIMM,9~36V DC input,Quad Display,SATA,Dual Intel® 2.5GbE,USB3.2,M.2,SoC,RoHS
KINO-TGL-U-i3-R10	Mini-ITX SBC with Intel® Tiger Lake-UP3 Core™ i3-1115G4E Processor,DDR4 SO-DIMM,9~36V DC input,Quad Display,SATA,Dual Intel® 2.5GbE,USB3.2,M.2,SoC,RoHS
KINO-TGL-U-CE-R10	Mini-ITX SBC with Intel® Tiger Lake-UP3 Celeron® 6305E Processor,DDR4 SO-DIMM, 9~36V DC input, Quad Display,SATA,Dual Intel® 2.5GbE,USB3.2,M.2,SoC,RoHS

## Packing List

1 x KINO-TGL-U single board computer	1 x SATA cable
1 x I/O shielding	1 x QIG