

# WAFER-TGL-U

3.5" SBC supports Intel® Tiger Lake-UP3 Core I™ Celeron® Processor, with HDMI, DP, iDPM, triple 2.5 GbE Lan port, USB 3.2, M.2, SATA 6Gb/s, COM, Audio and RoHS, -20°C ~60°C



## Features

1. 3.5" SBC with Intel® Tiger Lake-UP3 on board SOC processor, support SO-DIMM DDR4-3200 memory
2. Support Quadruple independent display: 2 x HDMI 1.4, 1 x DP 1.4, 1 x iDPM
3. High-speed I/O interface: 4 x USB 3.2 gen 2 (10Gb/s), SATA (6Gb/s)
4. Support three Intel®I225V 2.5GbE network port
5. Support M.2 A Key, B key extension

## Specifications

System	
CPU	11th Gen. Intel® mobile Tiger Lake-UP3 on board 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, dual-core, 6M Cache, TDP=28/15/12W)
	Intel® Celeron® 6305E (up to 1.8GHz, dual-core, 4M Cache, TDP=15W)
Memory	One 260-pin 3200 MHz DDR4 SO-DIMMs support up to 32 GB
Memory Max.	up to 32GB
Cooling method / System Fan	1 x System fan connector (1x4 pin, P=2.54)
Storage	
Storage	1 x SATA : 6Gb/s with 5V SATA power connector
I/O Interface	
Display Output	2 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	3 x LAN -
	LAN1: Intel® I225V 2.5GbE controller
	LAN2: Intel® I225V 2.5GbE controller
	LAN3: 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	1 x Internal RS-232 : 2x5 pin, P=2.0
	2 x Internal RS-232/422/485 : 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, P=2.0)
	4 x External USB 3.2 Gen2x1 : 10Gb/s
Expansion	2 x M.2(NGFF) -
	1 x M.2 A key (2230) with PCIe Gen3 x1/USB 2.0
	1 x M.2 B Key (2242/3052) for 5G with PCIe Gen3 x2/USB 2.0
Other Features	
TPM	Intel® PTT(TPM 2.0)
Power	
Power Supply	+12V DC input power (AT/ATX mode)
Environment	

Operating Temperature	0°C ~ 60°C
Storage Temperature	-20°C ~ 70°C
Humidity	5% ~ 95%, non-condensing
Certifications	
Safety & EMC	CE/FCC compliant

## Ordering Information

WAFER-TGL-U-i7-R10	3.5" SBC with Intel® Tiger Lake-UP3 Core™ i7-1185G7E Processor,DDR4 SO-DIMM,12V DC input,Quad Display,Triple M.2 with A/B key,Triple Intel® 2.5 GbE,SATA,USB3.2,SoC,RoHS
WAFER-TGL-U-i5-R10	3.5" SBC with Intel® Tiger Lake-UP3 Core™ i5-1145G7E Processor,DDR4 SO-DIMM,12V DC input,Quad Display,Triple M.2 with A/B key,Triple Intel® 2.5 GbE,SATA,USB3.2,SoC,RoHS
WAFER-TGL-U-i3-R10	3.5" SBC with Intel® Tiger Lake-UP3 Core™ i3-1115G4E Processor,DDR4 SO-DIMM,12V DC input,Quad Display,Triple M.2 with A/B key,Triple Intel® 2.5 GbE,SATA,USB3.2,SoC,RoHS
WAFER-TGL-U-C-R10	3.5" SBC with Intel® Tiger Lake-UP3 Celeron® 6305 Processor,DDR4 SO-DIMM,12V DC input,Quad Display, Triple Intel® 2.5 GbE,SATA,USB3.2,M.2,SoC,RoHS
WAFER-TGL-U-CE-R10	3.5" SBC with Intel® Tiger Lake-UP3 Celeron 6305E Processor,DDR4 SO-DIMM,12V DC input,Quad Display,Triple M.2 with A/B key,Triple Intel® 2.5 GbE,SATA,USB3.2,SoC,RoHS

## Packing List

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