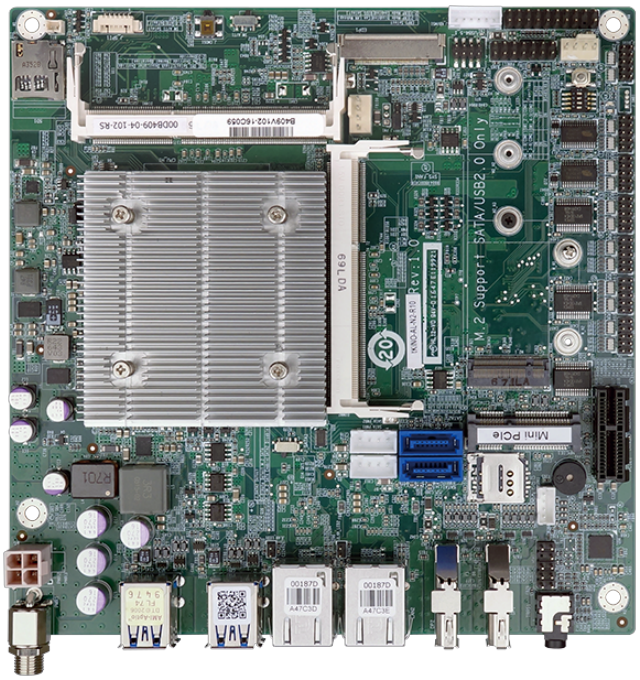
tKINO-AL

Thin Mini-ITX SBC supports Intel® 14nm Atom™, Pentium® or Celeron® on-board SoC with DP++



Features

» Thin Mini-ITX SBC supports Intel® 14nm Atom™, Pentium® or Celeron® on-board SoC supports dual-channel DDR3L SO-DIMMs

» Triple independent display support

» Full size PCIe Mini slot with SIM sockets for WWAN expansion

» COM, USB 3.0, SATA 6Gb/s and audio support

» IEI one key recovery solution allows you to create rapid OS backup and recovery

Specifications

System	
CPU	Intel® Pentium® N4200 on-board SoC (up to 2.5GHz, quad-core, 2M Cache, TDP=6W)
	Intel® Celeron® N3350 on-board SoC (up to 2.4GHz, dual-core, 2M Cache, TDP=6W)
Memory	Two 204-pin 1867/1600MHz Dual-channel DDR3L DIMMs
Memory Max.	8GB
Physical Characteristics	
Dimensions (LxWxH) (mm)	170 X 170
Net Weight	700
Storage	
Storage	2 x SATA :6Gb/s with 5V output
I/O Interface	
Display Output	1 x eDP 4 lane (up to 3840x2160@60Hz)
	2 x DP++ (up to 4096x2160@60Hz)
Audio	Description: Realtek ALC662 HD codec
	1 x Line out :on rear IO
	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
	2 x Internal USB 2.0 :2x4 pin, P=2.54
	1 x PS/2 :1x6 pin
Expansion	1 x PCIe x1
	1 x PCIe mini Card Slot :w/ SIM holder
	1 x M.2(NGFF) :B key (2242/2260/2280, USB 2.0 & colay SATA2)
Other Features	
TPM	2x10 pin
Power	
Power Consumption	12V@2.58A (Intel® Pentium® N4200 CPU with two 8GB 1600MHz DDR3L memory)
Power Supply	12V only DC input as Default,1 x Internal power connector (2x2 pin),1 x External DC power Jackc (Ø5.5mm),Support AT/ATX mode

Environment	
Operating Temperature	-20°C ~ 70°C
Storage Temperature	-40°C ~ 85°C
Humidity	5% ~ 95%, non-condensing
Certifications	
Safety & EMC	CE/FCC compliant

Ordering Information

tKINO-AL-N2-R10	Thin Mini-ITX SBC supports Intel® 14nm quad-core Pentium® N4200 2.5GHz on-board SoC with DP++, Dual PCIe GbE, USB 3.0, PCIe Mini, M.2, SATA 6Gb/s, COM, Audio and RoHS
tKINO-AL-N1-R10	Thin Mini-ITX SBC supports Intel® 14nm dual-core Celeron® N3350 2.4GHz on-board SoC with DP++, Dual PCIe GbE, USB 3.0, PCIe Mini, M.2, SATA 6Gb/s, COM, Audio and RoHS

Packing List

1 x tKINO-AL single board computer with heatsink	1 x SATA with power cable kit
1 x I/O Shielding	1 x QIG