

# ARK-3510

3rd Gen. Intel® Core™ i3/ i5/ i7 with  
2 x 2.5" Removable HDD Bays Fanless Box PC

**NEW**



## Features

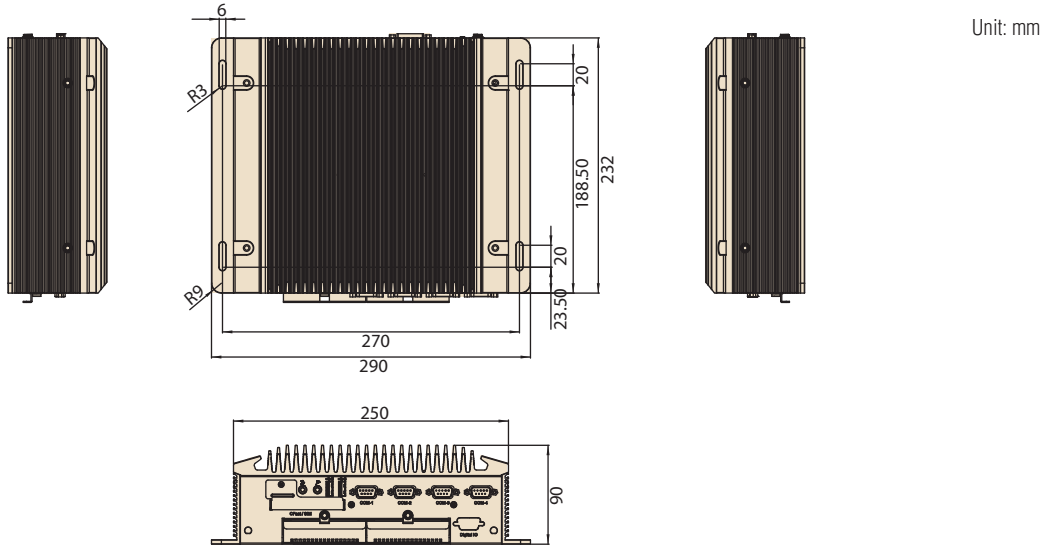
- Supports Intel® Core™ i3/i5/i7 mobile processor(rPGA) + Intel QM77 PCH
- Triple independent display with 3rd gen Core I processor : DVI + HDMI + DisplayPort
- DDR3/DDR3L SO-DIMM memory support up to 16 GB
- Supports 2 x 2.5" removable SATAIII drive bays
- 2 x miniPCIe cards with SIM card holders
- Versatile I/Os including 4 x high speed USB 3.0 and 4 x COM ports
- Lockable 12V DC jack design
- Supports iManager, WISE-PaaS/RMM and Embedded Software APIs



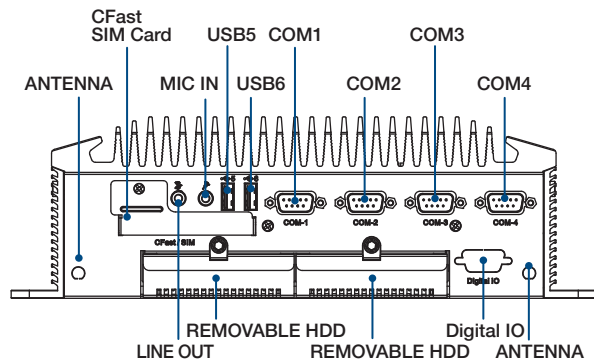
## Specifications

Processor System	CPU (rPGA)	Intel Core i7-3610QE	Intel Core i5-3610ME	Intel Core i3-3120ME	Celeron 1020E
	Frequency	2.3 GHz (Quad Core)	2.7 GHz (Dual Core)	2.4 GHz (Dual Core)	2.2 GHz (Dual Core)
	L3 Cache	6 MB	3 MB	3 MB	2 MB
	Watts	45W	35W	35W	35W
	System Chipset	Intel QM77			
Memory	BIOS	AMI EFI 64Mbit			
	Technology	DDR3/DDR3L 1600 MHz			
	Max. Capacity	16 GB			
Graphics	Socket	2 x 204-pin SO-DIMM			
	Chipset	Intel QM77 Integrated GFX Gen 7			
	Graphic Engine	DirectX11, OpenGL 3.1, and Open CL 11; Hardware decode acceleration: AVC/H.264, MPEG-2, VC-1			
	CRT	VGA integrated in DVI-I port			
	DVI-I	1920 x 1200 @ 60 Hz			
	HDMI	Support HDMI 1.4, 1920 x 1200 @ 60Hz			
	Display port	2560 x 1600 @ 60Hz (Video only, and only support on 3rd generation processor)			
	Dual Display	VGA+DVI, VGA+HDMI, VGA+DP, DVI+HDMI, DVI+DP, HDMI+DP			VGA+DVI, DVI+HDMI, VGA+HDMI
Triple Display	DVI-D + HDMI + DisplayPort(Main Display)			N/A	
Other	Watchdog Timer	255-level timer interval, setup by software			
Ethernet	LAN1	10/100/1000 Mbps Intel 82579LM GbE, support Wake On Lan			
	LAN2	10/100/1000 Mbps Intel I-210IT GbE, support Wake On Lan			
Audio	Interface	Realtek ALC892, High Definition Audio. Line-out, Mic-in			
I/O Interface	Serial Port	2 x RS-232 ports, 2 x RS-232/422/485 port with auto flow control			
	USB	4 x USB 3.0 ports (USB1,2,3,4) and 2 x USB 2.0 ports (USB5,6)			
Expansion	Mini PCIe	2 x Full-size Mini PCIe with SIM holder (Supports mSATA)			
Storage	HDD	Two 2.5" SATA removable HDD Bays with maximum device height 9.5mm, SATA III, Gen 3 Support (Max. Data Transfer Rate 600 MB/s), Support SATA RAID 0, 1			
	Solid State Disk	1 x CFAST Card			
Software Support	Microsoft Windows	Windows 8, Windows 7, XP Professional (32bit), XP Embedded (32bit)			
	Linux	Ubuntu 12.04			
Power Requirements	Power Type	AT/ATX			
	Power Input Voltage	12 V <sub>DC</sub> , ± 10% (9 ~ 34 V <sub>DC</sub> support by request)			
	Power Adapter	AC to DC, DC12V / 7A, 84 W (Optional)			
Power Consumption	Typical	19.2W	16.4W	14.8W	16.4W
	Max.	60W	36.5W	30W	31.8W
Mechanical	Construction	Aluminum housing			
	Mounting	Desk/wall-mounting			
	Dimensions (W x H x D)	290 x 90 x 232 mm (11.4" x 3.54" x 9.13")			
	Weight	4.63kg			
	Environment	Operating Temperature	with extended temp peripherals: -10 ~ 60° C with 0.7m/s air flow with HDD: 0 ~ 40° C with 0.7m/s air flow		
Storage temperature		-40 ~ 85° C			
Relative Humidity		95% @ 40° C (non-condensing)			
Vibration During Operation		With SSD: 3 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis.			
Shock During Operation		With SSD: 50 G, IEC 60068-2-27, half sine, 11 ms duration			
EMC		CE/FCC Class A, CCC, BSMI			
Safety		CB, UL, CCC, BSMI			

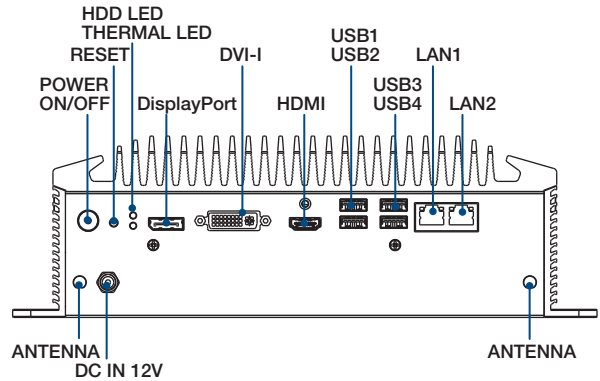
**Dimensions**



**Front Panel External I/O Mechanical Layout/Drawing**



**Rear Panel External I/O Mechanical Layout/Drawing**



**Ordering Information**

Part No.	CPU	DDR3	DP	HDMI	DVI-I	RS-232/422/485	RS-232	USB 3.0	USB 2.0	MiniPCIe	SIM	DC input	Expansion
ARK-3510L-00A1E	PGA Socket Type	up to 16 GB	1	1	1	2	2	4	2	2	2	12V	MIOe

Note: Memory, storage and operating system bundled by request.

**Packing List**

Part Number	Description
1654009744	DVI-I to VGA adaptor
968EMLSAP2	SUSI CD
2006351010	User Manual (Simplified Chinese)
-	China RoHS for ARK-3510 Electronic Pollution 1st
2190000902	CARDBOARD-WARRANTY REV. A2

**Embedded OS**

Part Number	Description
2070012634	WES2009 32bit 10MUI
2070012650	WES7E 32bit ENG/CHT/CHS/JPN
2070012706	WES7E 64bit ENG/CHT/CHS/JPN
2070014612	WES7P 32bit ENG/CHT/CHS/JPN
2070012627	WES7P 64bit ENG/CHT/CHS/JPN

**Optional Items**

Part Number	Description
96PSA-A84W12W6-1	AC-to-DC Adapter, DC 12V/7A 84W, 0~40° C for Home and Office Use
96PSA-A150W12W7	AC-to-DC Adaptor, DC 12V, -20 ~ 70° C
1702002600	Power cable 3-pin 180cm, USA type
1702031801	Power cable 3-pin 180cm, Uk type
1702002605	Power cable 3-pin 180cm, EU type
1700000237	Power cable 3-pin 180cm, with PSE
96MPI7M-2.3-6M9T	CORE 2.3G 6M 988P 4CORE I7-3610QE(G)
96MPI5-2.7-3M9T	CORE 2.7G 3M 988P 2CORE I5-3610ME(G)
96MPI3M-2.4-3M9T	CORE 2.4G 3M 988P 2CORE I3-3120ME(G)
96MPCM-2.2-2M9T	CELERON M 2.2G 2M 988P 2CORE 1020E(G)