

TANK-101B

Fanless Embedded Controller with Dual Core Intel® ATOM™ D525



TANK-101B is designed with all the functions and protections compliant with targeting transport market. TANK-101B provides not only the dual core computing power delivered by Intel® Atom™ D525, its onboard memory with CompactFlash/SATA DOM solid-state storage can withstand the severe operating environment on board. With typical voltage at 24VDC, TANK-101B can take wide range DC input from 9V to 36V as power source. It also has COM port and CANBus with isolation protection for device control, dual Intel® GbE LAN and 802.11b/g/n for high speed communication. TANK-101B supports all these versatile functions in a compact enclosure yet support fanless operation.

**It is self-validated by IEI inside lab.*

- ♦ Dual core Intel® ATOM™ D525 inside
- ♦ Wide range 9~36VDC power input with insulation protection
- ♦ Isolation protected COM and CAN communication



New Intel® Atom™ Dual Core

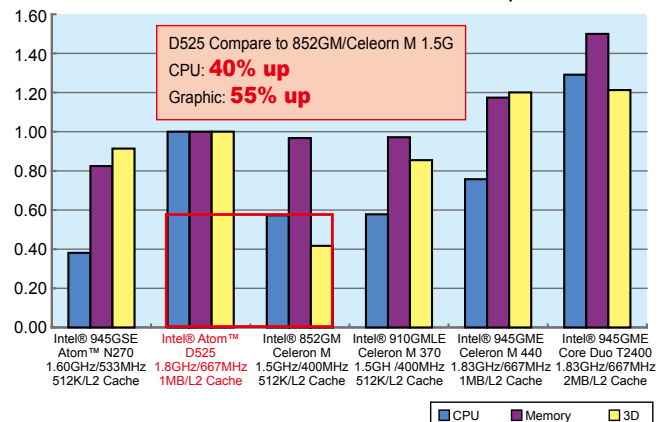
Luna Pier Refresh is the new generation two chip dual core solution of Intel® Atom™ family. Empowered by 45nm process technology, Luna Pier Refresh has the following features:

- New 2-chip solution for ~33% reduction in total kit package size
- 45nm process technology delivers more performance at lower TDP
- Provides mobile single core to desktop dual-core scalability
- 3rd generation graphic core with 400MHz render clock speed

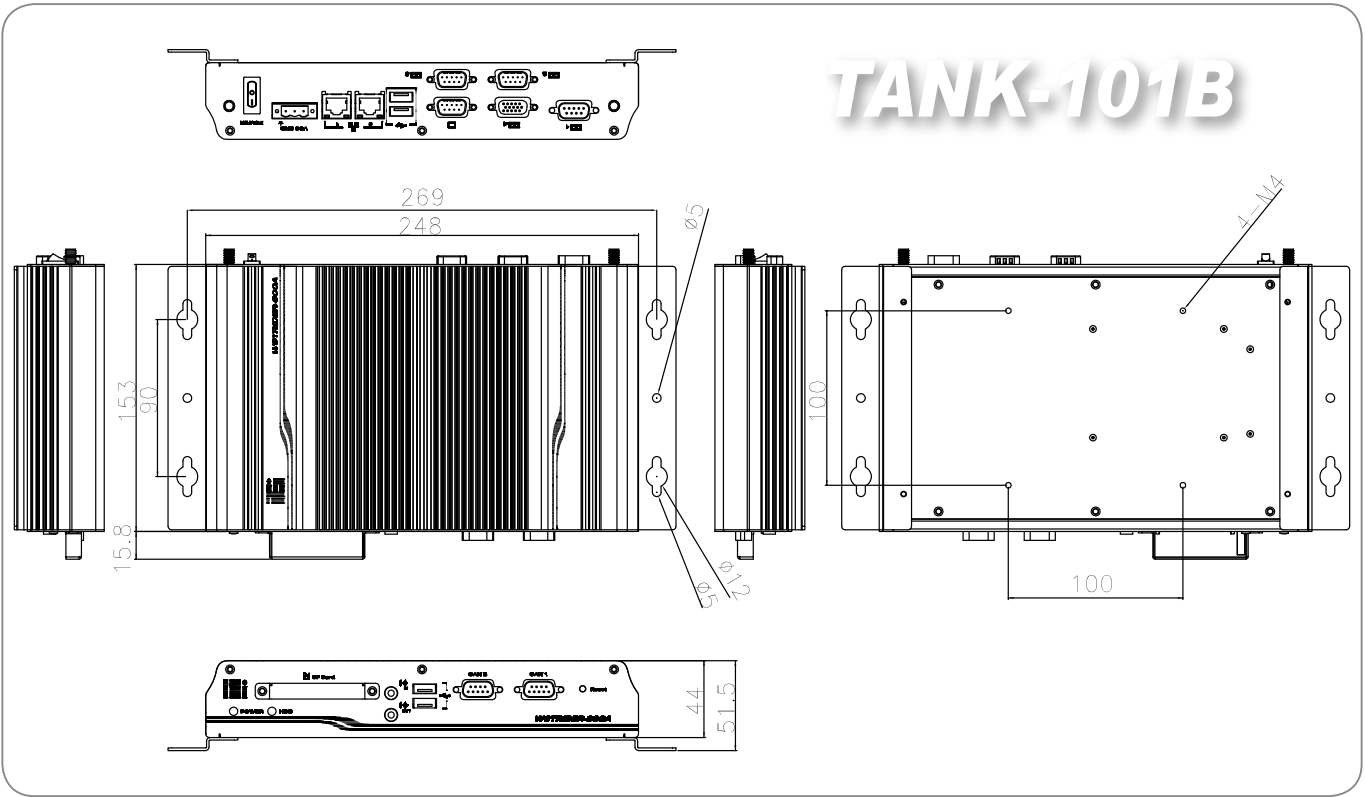
Embedded Intel® Dual Core Atom™ Solution

Platform	Atom™ 330	Atom™ D525
CPU/Chipset	Atom™ 330 1.6GHz Dual Core/ Intel® 945GC	Atom™ D525 1.8GHz Dual Core
FSB	533MHz	N/A
TDP	32W (8W Atom™ + 24W 945GC)	14.6W
L2 Cache	512KB	1024KB
Supported Memory	DDR2 (400/533MHz) up to 2GB	DDR2 (667/800MHz) up to 4GB
Graphic Output	VGA, 2 x SDVO	VGA, Single 18-bit LVDS
Graphics Cores	GMA 950	GMA 3150
South Bridge	ICH7/R	ICH8M
PCI-Express	4 Lanes (4x1 or 1x4), PCI Express 1.1	6 Lanes (1x4+ 2x1), PCI Express 1.1
PCI	PCI Rev 2.3 @ 33MHz up to 4 Bus Masters	PCI Rev 2.3 @ 33MHz up to 2 Bus Masters
I/O	8 x USB2.0, 2 x SATA, 1 x IDE, AC'97, HD audio	10 x USB2.0, 3 x SATAII, 1 x IDE, HD audio
TDP	1.7W	2.4W

Intel® Dual Core Atom™ D525/1.8GHz Performance comparison chart



Dimensions (unit: mm)



Specifications

	Model Name	TANK-101B
	Platform	Intel®
Chassis	Color	Cool Gray+Blue
	Dimensions	248 x 138 x 44mm
	Chassis Construction	Aluminum Alloy with heavy duty metal
Motherboard	Motherboard Model	System board
	M/B Size	System Board
	Processor CPU	Intel® Atom™ D525 processor 1.8GHz /1MB L2 cache
	Chipset	ICH8M
	System Memory	1G DDR3 on board + 1 x Socket (Up to 2GB)
Storage	Hard Drive	1 x 2.5" SATA HDD
	Compact Flash	1
System Function	USB	4
	Ethernet	2 x GbE
	RS-232	3 w/ isolation
	RS-232/422/458	1 w/ isolation
	Display	1 x VGA
	Resoluition	2048 x 1536 @ 60 Hz
	Audio	1 x Mic in, 1 x Speaker out
	Other	2 x CAN w/ isolation
	Wireless	1 x 802.11 b/g
	Mini-PCIe/PCI	2 (Mini-PCIe)
	Expansions	1 x PC-104
	Power	Wide Range Power In
Power Model		12VDC in with 60W power adapter
Mounting		DIN mount, wall mount
Reliability	Operating Temperature	-20°C ~ 70°C with CompactFlash®/SSD
	IP 67	IP22
	Operating Shock	Half sine wave 3G; 11ms 3axis
	Operating Vibration	MIL-STD-810F 514.5C-1 MIL-STD-810F 514.5C-2
	Weight (Net/Gross)	2.1kg/3.9kg
Certification	EMC/Safety	CE, FCC class A, UL

Packing List

1 x QIG
1 x Driver CD
1 x Screw set
2 x Wireless antenna(For wireless model only)
1 x SATA hard drive cable
2 x Wall mount bracket

Ordering Information

Part No.	Description
TANK-101B-R10/D525/1GB	Extend temperture Fanless embedded system with dual core Intel® ATOM™ Processor D525 1.8GHz CPU with two isolated CAN, two isolated Serial Ports, 1GB DDR2 memory onboard, 9~36V DC in, Pantone 287C + Cool Gray 2C, -20°C ~ 70°C, RoHS
TANK-101BW-R10/D525/1GB	Fanless embedded system with dual core Intel® ATOM™ Processor D525 1.8GHz CPU with two isolated CAN, two isolated Serial Ports, built-in 802.11b/g wireless, 1GB DDR2 memory onboard, 9~36V DC in, Pantone 287C + Cool Gray 20°C ~ 50°C, RoHS

Embedded OS support

TANK-101B-XPE-1GB	Windows XP Embedded OS image, for TANK-101B, with 1GB CompactFlash memory card, RoHS
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* For other CompactFlash® capacity, please contact with IEI for customization.