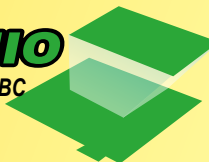


# KAMIO series SBC



**KAMIO**  
RISC-based SBC



▶▶RISC (Reduced Instruction Set Computing) solutions use simpler instruction sets to achieve higher clock frequencies and process more instructions per clock cycle.

▶▶KAMIO series enable the great embedded flexibility for RISC-based platform. KAMIO provides high performance at low power consumption at a lower cost compared with typical X86 CISC (Complex Instruction Set Computing) processors applied to embedded applications.

▶▶Each KAMIO platform is driven by an powerful RISC CPU with built-in WDT (Watchdog Timer) functions, has a touch screen TFT display interface, and come with a series of integrated external peripherals.

▶▶Equipped with RISC CPU and Windows® CE or embedded Linux embedded OS, the KAMIO series are with high performance, fan-less design, low-power consumption, wide operating temperature, and wide-input-voltage range features.



## KAMIO series RISC SBC specifications



Model Name	KAMIO-1251	KAMIO-2701A / 2702A	KAMIO-2703	KAMIO-CB01A
CPU Socket	On-board	On-board	On-board	COM (CPU on module) (KAMIO-CM01A)
CPU Level	Alchemy AU1250 500 MHz	PXA270 520MHz	PXA270 520MHz	PXA270 520MHz
Boot ROM	2 MB	2 MB	2 MB	2 MB
RAM	128 MB DDR2	128 MB SDRAM	128 MB SDRAM	128 MB SDRAM
Storage Device	256 MB CompactFlash	256 MB CompactFlash	1GB Secure Digital card	256 MB CompactFlash
Max. Resolution	XGA	SVGA	SVGA	SVGA
LCD Interface	24-bit TTL and 18-bit LVDS	18-bit TTL and LVDS	18-bit TTL	18-bit TTL and LVDS
Multimedia Support	MPEG 1/2/4, WMV9	MPEG 1	MPEG 1	MPEG 1
I/O Interface	2 x USB2.0 host 1 x RS-232 1 x RS-232/422/485 2 x 10/100 Mbps LAN Mic-in x 1, Line-out x 1 4-wired resistive touch i/F Reset button	2 x USB1.1 1 x RS-232 1 x RS-232/422/485 2 x 10/100 Mbps LAN Mic-in x 1, Line-out x 1 4-wired resistive touch i/F Reset button	2 x USB1.1 1 x RS-232/422/485 (SW controllable) 2 x 10/100 Mbps Mic-in x 1, Line-out x 1 4-wired resistive touch i/F Reset button	2 x USB2.0 1 x RS-232/422/485 1 x 10/100 Mbps Mic-in x 1, Line-out x 1 4-wired resistive touch i/F Reset button
Wireless LAN	KAMIO-WL01 optional module (802.11b/g)	N/A	802.11b/g	KAMIO-WL01 optional module (802.11 b/g)
Operating Temperature	0°C~70 °C	-20°C~70°C	-20°C~70°C	-20°C~70°C
Power Requirement	5V and 12V DC-IN	5 V and 12 V DC-IN	12~36 V DC-IN	9~36 V DC-IN
Power Mode	AT	AT	AT	AT / ATX
Power Consumption	12 V @ 0.3 A	12 V @ 0.15 A	12 V @ 0.3 A	12 V @ 0.4 A
Dimension W x H (mm)	180 x 135.4	180 x 135.4	122.7 x 96	114 x 95
Humidity	5%-90%RH	5%-90% RH	5%-90%RH	5%-90%RH

1

Industrial Computing Solutions

2

Embedded Computing Solutions

3

RISC-Based Embedded Solutions

4

Industrial Data Collector/ Server Solutions

5

Video Capture Solutions

6

I/O Communication Solutions

7

Panel Solutions

8

Power Supply/ Network Communication/ Peripherals

# SDK (software development kit) and BSP (board support package)

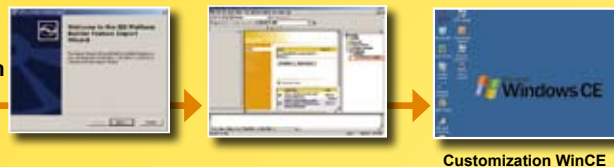
## Software Support

KAMIO series is shipped with pre-installed Windows® CE 5.0 or Linux kernel 2.6.18, along with rich application software development kit :

### Windows® CE5.0

- Standard Windows® CE5.0 professional version license.
- Attached Software Development Kit (SDK) for eMbedded Visual C++ to program Windows® CE application.
- Built-in .NET Compact Framework support with related SDK
- Thin Client Technology, Microsoft RDP (Remote Desktop Protocol), to enable KAMIO series to access Microsoft Windows® based applications installed on Microsoft Terminal Service server.
- Free pre-installed IEI WinCE utility for configuring and diagnosing your KAMIO.
- Free IEI RMT (remote management tool) can be installed in your laptop for remotely configuring, monitoring, and managing your KAMIO platform.
- Optional Board Support Package (BSP) for customers to customize their own OS image.

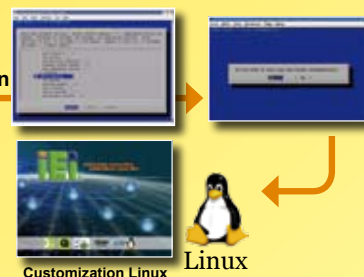
Windows® Platform Builder



### Linux Kernel 2.6.18

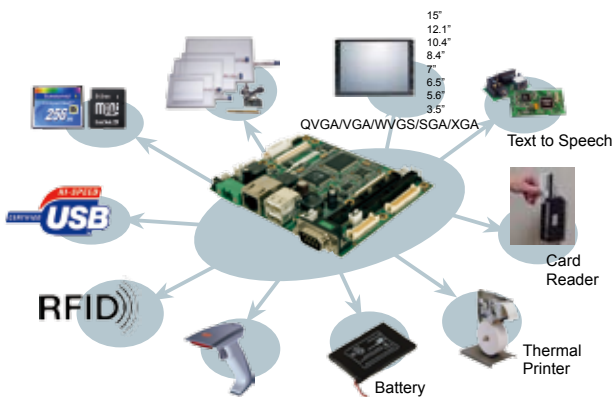
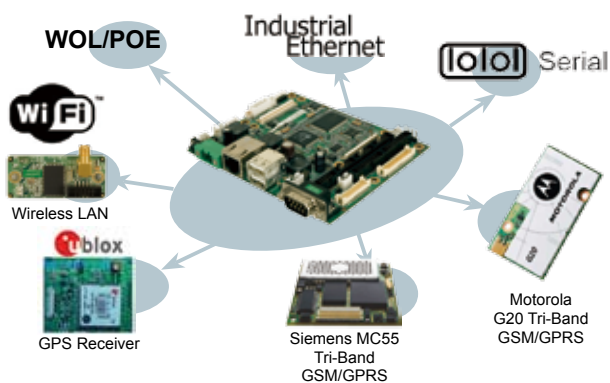
- GNU standard Embedded Linux 2.6.18 bootloader and OS image including.
- Secure Shell (OpenSSH) providing 128-bit, 192-bit or 256-bit encryption between the KAMIO and another system
- Built-in web browser and X-window system
- Related Linux drivers for onboard peripheral I/O, network and audio
- Attached SDK including GUI, Sample Code, and Tool chain make users program application readily.
- Optional Board Support Package (BSP) including kernel source code for customers to customize their own OS image.

Embedded Linux Kernel configuration



## Integration and Design for ODM/OEM

The KAMIO series embedded SBC have successfully to been integrated into a wide range of application devices such as LVDS/TTL TFT LCD panel, touch screen, storage device, RFID reader, barcode scanner, thermal printer, magnetic stripe card reader, battery solution, serial communication, wireless LAN, and POE (Power over Ethernet)...etc.



### System Customization

IEI provides a professional ID-design team designing to design chassis, front bezel and enclosure for practical and fashionable modeling.



2D/3D Gaming Machine Portable Device



Vehicle Entertainment System 2D/3D GPS Navigator



Automobile PC Telematics



Industrial Embedded Controller Data Collector