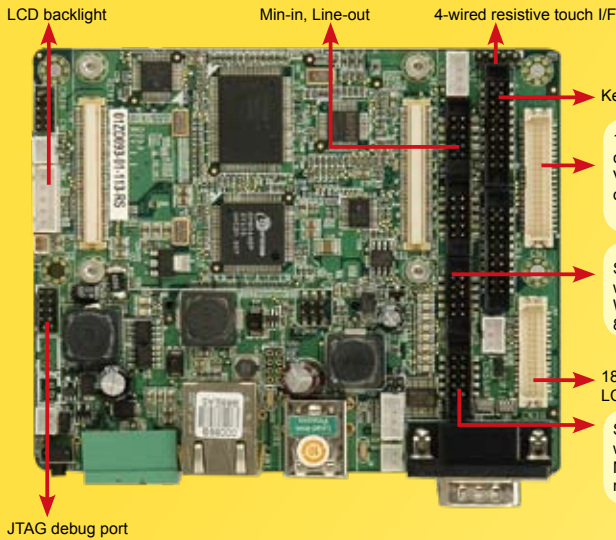


# KAMIO-CB01A / CM01A ARM-based SBC



**XScale® COM**  
(computer on module)  
solution

18-bit TTL LCD I/F can connect with KAMIO-VGA01 output module  
**KAMIO-VGA01**

SPI I/F can connect with KAMIO-WL01 WiFi module supports 802.11 b/g  
**KAMIO-WL01**

18-bit LVDS LCD I/F

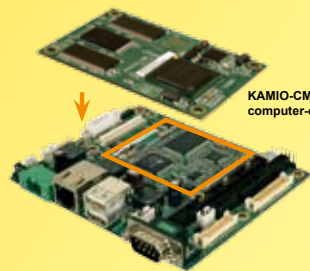
SDIO I/F can connect with KAMIO-SD01 Mini SD card reader module  
**KAMIO-SD01**



Preinstalled Windows® CE5.0 or ARM-Linux boot from CompactFlash card



**CF card**



**KAMIO-CM01A**  
computer-on-module



## Features:

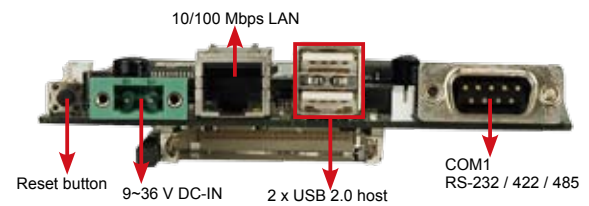
- MARVELL XScale PXA270 520MHz processor
- Board-to-Board CPU and I/O flexible application.
- Extremely durable in harsh environments.
- Compact form factor.
- Low power consumption.
- No cooling fan required.
- Built-in TTL TFT LCD interfaces and touch controller.
- Standard peripheral device interface connectors include Ethernet, Serial, USB ports, CompactFlash memory, and audio.
- Preinstalled Windows® CE5.0 or Gnu/Linux with Rev2.6.18 kernel embedded operating system
- Windows® CE5.0 SDK or ARM-LINUX\_GCC tool chain for user application software development.

## Packing List

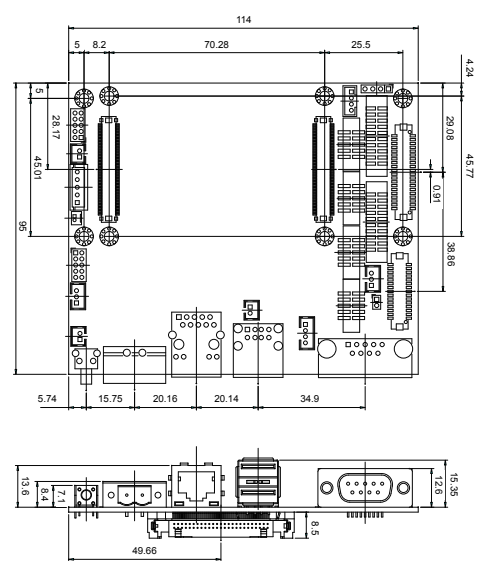
KAMIO-CM01A	1 x KAMIO-CM01A CPU board (main board)
	1 x KAMIO-CB01A carry board (I/O function board)
KAMIO-CB01A	1 x Utility CD includes application tools, SDK, and technical document
	1 x CompactFlash card with built-in Windows® CE5.0 or ARM-Linux kernel Rev2.6.18

## Ordering Information

Part No.	Description
<b>KAMIO-CM01A-R10</b>	MARVELL XScale PXA270 RISC-based CPU board with Windows® CE5.0 bootloader for KAMIO-CB01A-R10
<b>KAMIO-CM01AUX-R10</b>	MARVELL XScale PXA270 RISC-based CPU board with Embedded Linux bootloader for KAMIO-CB01AUX-R10
<b>KAMIO-CB01A-01A-R10</b>	MARVELL XScale PXA270 RISC-based carry board for KAMIO-CM01A Computer-on-Module with 256MB CompactFlash card and built-in Windows® CE5.0 OS
<b>KAMIO-CB01A-01AUX-R10</b>	MARVELL XScale PXA270 RISC-based carry board for KAMIO-CM01A Computer-on-Module with 256MB CompactFlash card and built-in ARM-Linux kernel Rev2.6.18



## Dimensions (Unit : mm)



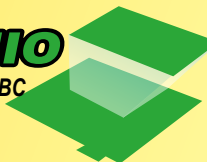
## Options

Part No.	Description
<b>KAMIO-VGA01-R10</b>	LCD TTL interface to analog VGA output module
<b>KAMIO-SD01-R10</b>	Mini SD card reader module
<b>KAMIO-WL01-R20</b>	Wireless LAN module supports 802.11b/g

# 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