

# ROM-1210 Evaluation Kit

NXP ARM® Cortex®-A8 i.MX53 COM with  
Linux Kernel 2.6



## Features

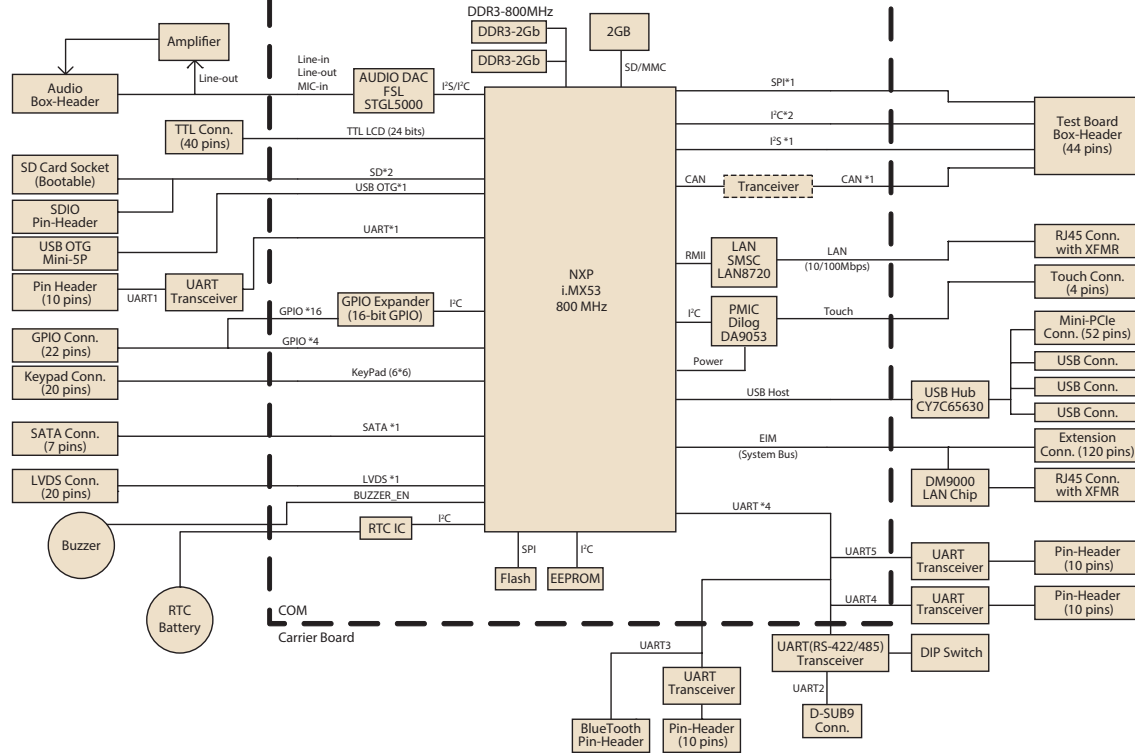
- Evaluation kit for ROM-1210
- Low power NXP i.MX53 800MHz processor
- Rich IO for industrial applications
- System bus 100-pin and keypad 6x6
- Linux and WinEC 7 support
- Cable pack & Panel included
- Evaluative image & test utilities built-in



## Specifications

Form Factor		ROM-1210 Evaluation Kit
Processor system	CPU	NXP ARM Cortex-A8 i.MX53 800MHz
Memory	Technology	DDR3 800 MHz
	Capacity	On-board DDR3 512 MB
	Flash	4 GB eMMC NAND Flash for O.S. and 4 MB SPI NOR Flash for Advantech boot loader
Graphics	LVDS	Dual channel 18/24-bit LVDS, 1920 x 1080
	HDMI	-
	Parallel RGB	1920 x 1080
	VGA	-
	Graphics Engine	1 IPU's OpenGL ES 2.0 for 3D, BitBlit for 2D and OpenVG 1.1
	H/W Video Codec	Decoder: MPEG-4 ASP, H.264 BP, H.263, MJPEG BP Encoder: MPEG-4 SP, H.264 BP, H.263, MJPEG BP
Ethernet	Chipset	NXP i.MX53 integrated RGMII
	Speed	2 x 10/100 Mbps
RTC	RTC	-
WatchDog Timer		256-level timer interval, from 0~128 sec
I/O	PCIe	-
	SATA	1 SATA I
	USB	1 USB 2.0, 1 USB 2.0 OTG
	Audio	1 Line in, 1 Audio out
	SPDIF	-
	SDIO	1 SD card slot, 1 SDIO jack
	Serial Port	5 UART (2 x 2 wire, 3 x 4 wire w/ 3.3V)
	SPI	-
	CAN	2 CAN bus 2.0B
	GPIO	20
	I <sup>2</sup> C	2
	Camera Input	-
	System Bus	Address: 25 bits Data: 16 bits
	Touch	1
Keypad	6 x 6 Matrix	
Power	Power Supply Voltage	12V
	Power Consumption	2.2W
Environment	Operating Temperature	0 ~ 60 °C
	Operating Humidity	0% ~ 90% relative humidity, non-condensing
Mechanical	Dimensions (W x D)	205 x 125 mm (8" x 4.9")
Operation System		Linux Kernel v2.6.35
Certifications		CE/FCC Class A

## Block Diagram



## Ordering Information

Part No.	Description
ROM-1210DK-800E	Evaluation kit for NXP i.MX53 w/ Linux 512 MB DDR3 SDRAM, 2 GB on board flash

## Packing List

Part No.	Description	Quantity
ROM-1210CF-A78AAE	FSL i.MX536 512MB DDR3 RAM w/ 2GB flash	1
96920CSB02E	ASSY for RTX-CSB A1 01-3 RoHS	1
96LEDK-A070WV32RB1	LCD-LED Backlight 7" LVDS RGB 97G070V1N0F-2	1
170000194	Touch cable	1
1700014418	LVDS cable	1
1700014438	LCD backlight cable	1
96PSA-A36W12R1	Adapter 100-240V 36W 12V 3A	1
1700018785	SATA power cable	1
1700004711	SATA signal cable	1
1700019546-11	Speaker & audio Cable	1
1700100250	F Cable IDE#2 10P-2.0/D-SUB 9P (M)	2
1700019129	USB type A Host	1
1700019077	mini usb cable (Client)	1
1700019076	mini usb cable (Host)	1
1654909900	Terminal connector 9P female	1
1700019474	D-SUB 9P(F) 2 wires/RS485 cable	1
1700019476	D-SUB 9P(F) RS422 cable	1
2062121012	DVD-ROM FOR ROM-1210 evaluation kit V1.0	1
SQF-ISDS2-2G-ETE	SQFlash SD card SLC 2G, 2CH (-40 ~ 85° C)	1

## Optional Accessories

Part No.	Description
1700001524	Power cord 3P UL 180cm
170203183C	Power cord 3P EU 183cm
170203180A	Power cord 3P UK 183cm
1700008921	Power Cord 3P PSE 183cm
EWM-W150H02E	Advantech 802.11bgn/RT5390 1T1R /USB signal
1750007050-01	WiFi RP-SMA short SMA Jack(9.5mm) to U.FL_100mm (WiFi Cable)
1750000318	EMI Antenna 2DBI 2.4GHz SMA CONN for ARK-3384 (WiFi Antenna)
EWM-C106FT01E	Cellular, HSUPA/WCDMA/GPRS, Full Mini PCIe
1750007156-01	Cellular/GPS SMA Short JACK(9.5MM) L=100mm (3G Cable)
1750005865	Antenna L=10.9cm 500hm AN8921F-5701SM (3G Antenna)