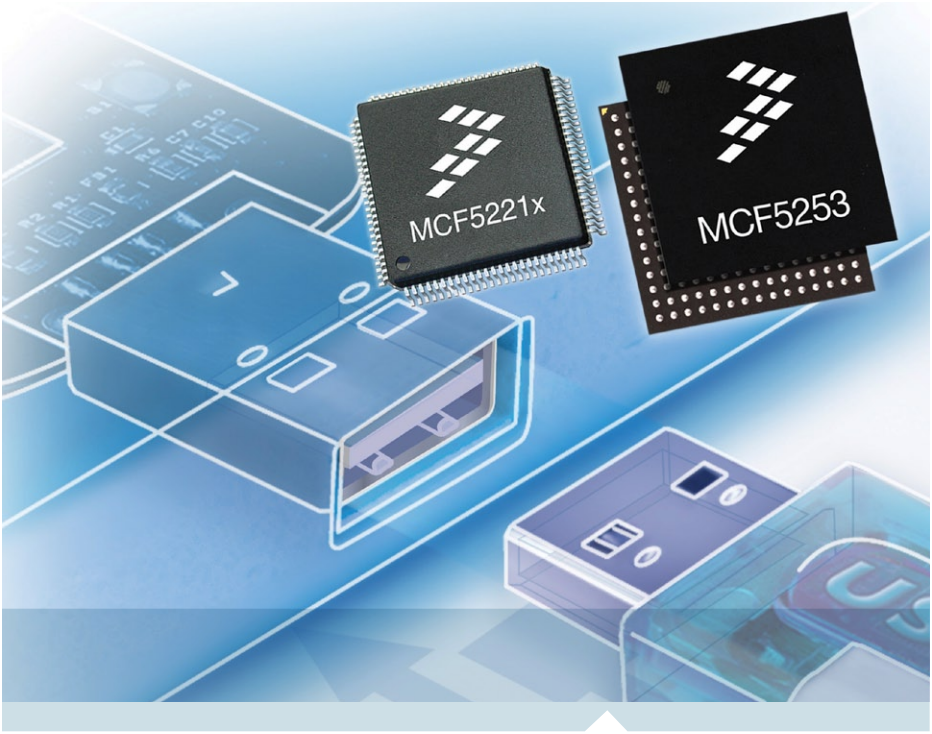


ColdFire® Embedded Controllers

M5253DEMO Development Tool

Cost-effective simplicity

- **Quick Start Guide**
- **CodeWarrior™ Manual**
- **Getting Started DVD**

freescale™ semiconductor

Get to Know the M5253DEMO Board

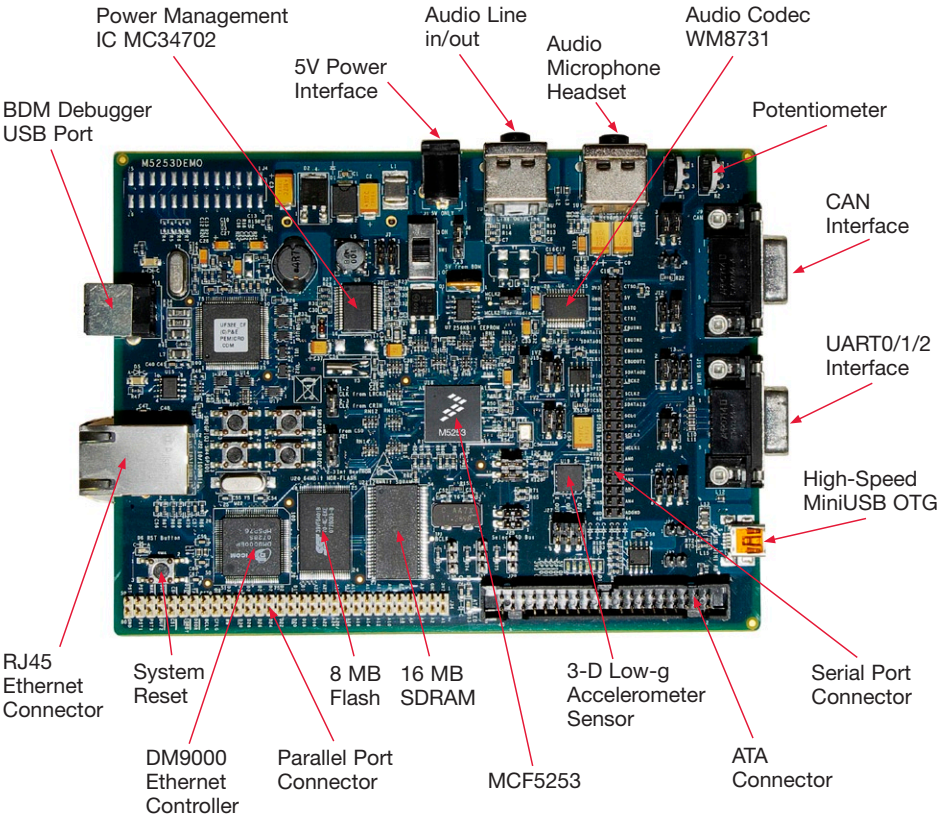
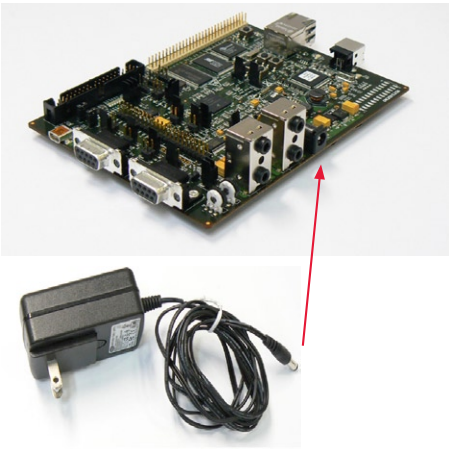


Figure 1. M5253DEMO

Step-by-Step Installation Instructions

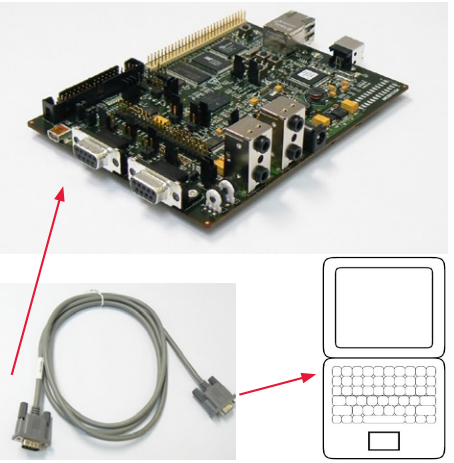
STEP 1

Plug in power cable.



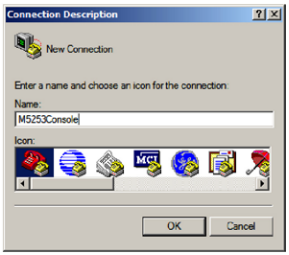
STEP 2

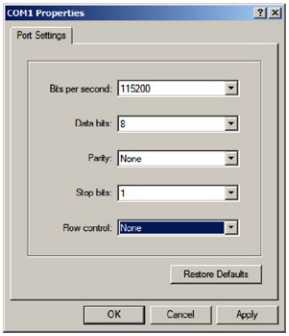
Connect the DB9 connector to the board.



STEP 3

Open and configure HyperTerminal as follows:



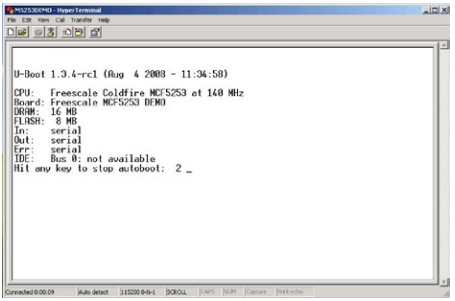


This is how the COM1 parameter should be set:

Parameter	Setting
Baud rate	115200bps
Data bits	8
Parity	None
Stop bits	1
Flow control	None

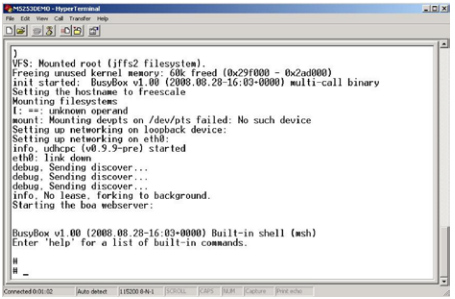
STEP 4

Push the on-board power switch SW1, and verify U-Boot prompt welcome screen on HyperTerminal.

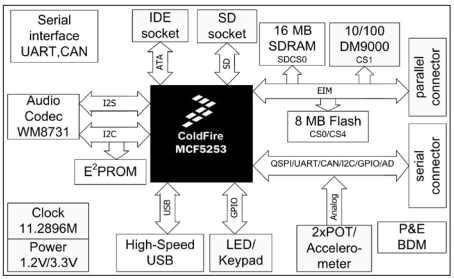


STEP 5

Do not press any key, the U-Boot will auto-boot µCLinux.



M5253DEMO board system block:



Top level memory map:

Function	Start Address	End Address	Size
SDRAM	0x0000_0000	0x00FF_FFFF	16 MB
SIM MBAR	0x1000_0000	0x1000_0058	96 B
Internal SRAM0	0x2000_0000	0x2000_FFFF	64 KB
Internal SRAM1	0x2001_0000	0x2001_FFFF	64 KB
SIM MBAR2	0x8000_0000	0x8000_01FF	512 B
Ethernet Controller DM9000 CS1	0xE000_0300	0xE000_03FF	64 B
FLASH CS0	0xFF80_0000	0xFFFF_FFFF	8 MB

Boot Mode (no shunt default):

J29	J30	J31	Boot Mode
2:3	2:3	2:3	I^2C MASTER
1:2	2:3	2:3	SPI MASTER
2:3	2:3	1:2	IDE MASTER
2:3	1:2	2:3	I^2C SLAVE
1:2	1:2	2:3	UART (5.6448/11.2896 MHz Xtal)
2:3	1:2	1:2	UART (8.4672/16.9344/33.8688 MHz Xtal)
2:3	1:2	1:2	UART (5/10/20 MHz Xtal)

Default switch:

Reference Designator	Setting[1][2]	Function
J21	*1:2*	BOOT from CS0
	2:3	BOOT from internal ROM (for serial bus boot)
J16	1:2	Audio CLK from LRCK3 PIN
	2:3	Audio CLK from CRIN PIN
J26,J32	ON	USB host enable
	OFF	USB device/OTG mode
J25	ON	BOOT from CS0
	OFF	BOOT from internal ROM (for serial bus boot)
J23	*ON*	I2C0/SDATA pin used for I2C0
	OFF	I2C0/SDATA pin not used for I2C0
J10	*ON*	WM8731 MCLK from MCLK2 of MCF5253
	OFF	WM8731 MCLK from the on crystal
J5(2x2)	2x *ON*	AD0, 1 input from on-board potentiometer
	OFF	AD0, 1 not input from on-board potentiometer
J27(2x3)	3x *ON*	AD2, 3, 4 input from on-board 3-axis accelerometer
	OFF	AD2, 3, 4 not input from on-board 3-axis accelerometer
J7(2x2)	ON	BUFEN1# and TXD2 used for GPIO of SD socket
	OFF	BUFEN1# and TXD2 not used for GPIO of SD socket
J24	*1:2*	RXD signal from RXD0
	3:4	RXD signal from RXD1
	5:6	RXD signal from RXD2
J13	*1:2*	TXD signal from TXD0
	3:4	TXD signal from TXD1
	5:6	TXD signal from TXD2
J20	*1:2*	RTS# signal from RTS0#
	3:4	RTS# signal from RTS1#
J12	*1:2*	CTS# signal from CTS0#
	3:4	CTS# signal from CTS1#
J14	*1:2*	CANTX signal from CAN0_TX
	3:4	CANTX signal from CAN1_TX
J18	*1:2*	CANRX signal from CAN0_RX
	3:4	CANRX signal from CAN1_RX
J8	ON	CAN bus terminator 120 ohm connected
	OFF	CAN bus terminator 120 ohm disconnected
J6	*1:2*	5V input from power jack
	2:3	5V input from the BDM module
J15	*1:2*	1.2V core voltage from power management IC
	2:3	1.2V core voltage from MCF5253 internal LD

* indicates the default setting
ON indicates that a shunt should be fitted on the jumper
OFF indicates that no shunt should be applied

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Agile Number: 926-24470 / REV A

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