

MINI-MAX/ARM9 Boot Configuration

MINI-MAX/ARM9 series boards can be configured to run ARM9 Linux or Debian. The boot location can be either on-board DataFlash or USB Flash Drive.

To configure a board for any of these options, stop U-BOOT during the boot process by pressing a key:

```
Mini-Max/ARM-SAM9260 rev 1.08(10)
BiPOM Electronics, Inc.
www.bipom.com

U-Boot 2008.10 (Mar 1 2009 - 18:37:50)

DRAM: 64 MB
DataFlash:AT45DB642
Nb pages: 8192
Page Size: 1056
Size= 8650752 bytes
Logical address: 0xD0000000
Area 0: D0000000 to D0003FFF (RO) Bootstrap
Area 1: D0004000 to D0007FFF Environment
Area 2: D0008000 to D002FFFF (RO) U-Boot
Area 3: D0030000 to D042FFFF Kernel
Area 4: D0430000 to D083FFFF FS
In: serial
Out: serial
Err: serial
Net: macb0
macb0: PHYID1=0x0181
macb0: PHYID2=0xb8a0
macb0: DM9161 reset...
DM9161_BMCR Basic Mode Control Register = 0x3100
DM9161_BMSR Basic Mode Status Register = 0x7849
DM9161_PHYID1 PHY Identifier Register 1 = 0x0181
DM9161_PHYID2 PHY Identifier Register 2 = 0xb8a0
DM9161_ANAR Auto_Negotiation Advertisement Register = 0x01e1
DM9161_ANLPAR Auto_negotiation Link Partner Ability Register = 0x0000
DM9161_ANER Auto-negotiation Expansion Register = 0x0000
DM9161_DSCR Specified Configuration Register = 0x0c14
DM9161_DSCSR Specified Configuration and Status Register = 0xf200
DM9161_10BTCSR 10BASE-T Configuration and Satus Register = 0x5800
DM9161_MDINTR Specified Interrupt Register = 0x1f00
DM9161_RECR Specified Receive Error Counter Register = 0x0000
DM9161_DISCR Specified Disconnect Counter Register = 0x0000
DM9161_RLSR Hardware Reset Latch State Register = 0xd6e0
macb0: Autonegotiation timed out (status=0x7849)
macb0: link down (status: 0x7849)
Hit any key to stop autoboot: 0
U-Boot>
```

1) To run Debian on MINI-MAX/ARM9260-E or MINI-MAX/ARM9G20, type the following at the U-BOOT prompt:

```
setenv bootargs mem=64M console=ttyS1,115200 root=/dev/sda2 rw rootwait
setenv bootcmd 'run logo; run linux'
setenv logo 'usb start; fatload usb 0:1 0x20000000 logo; cp.l 20000000 10400000 12C00'
setenv linux 'usb start; fatload usb 0:1 0x21000000 uimage; bootm 0x21000000'
saveenv
```

FAT partition should have ulmage, logo and drivers folder (you do not need any mmfs.gz or gpcfs.gz at all)

2) To run ARM9 Linux on MINI-MAX/ARM9260-E, type the following at the U-BOOT prompt:

```
setenv bootcmd 'usb start; fatload usb 0:1 0x21000000 uimage; fatload usb 0:1 0x20410000 mmfs.gz; bootm 0x21000000'
setenv bootargs 'mem=64M console=ttyS1,115200 root=/dev/ram0 rw initrd=0x20410000,0x800000 ramdisk_size=8200'
saveenv
```

3) To set up environment to boot MINI-MAX/ARM9G20 from Dataflash, type the following at the U-BOOT prompt:

```
setenv bootcmd 'usb start; fatload usb 0:1 0x21000000 uimage; fatload usb 0:1 0x20410000 gpcfs.gz; bootm 0x21000000'
setenv bootargs 'mem=64M console=ttyS1,115200 root=/dev/ram0 rw initrd=0x20410000,0x800000 ramdisk_size=8200'
saveenv
```