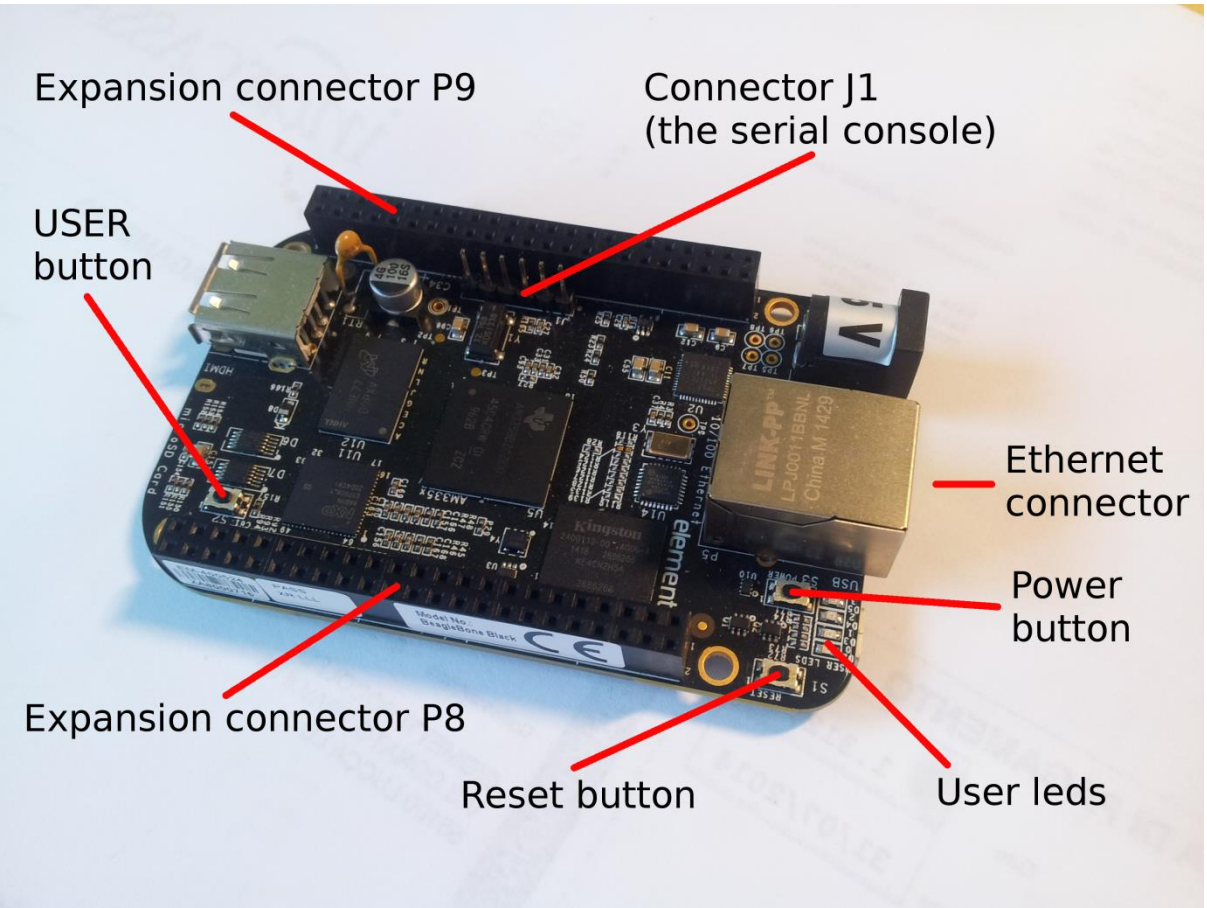
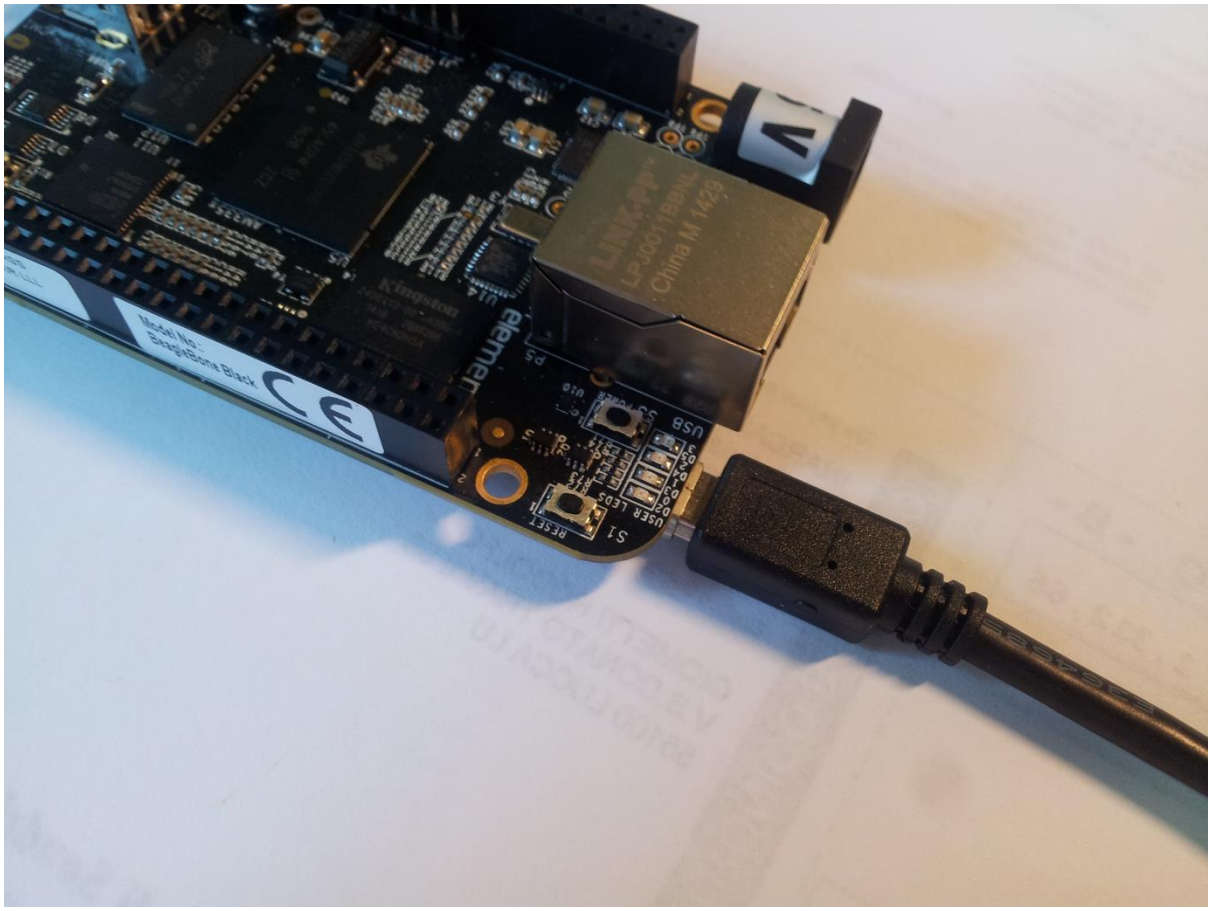
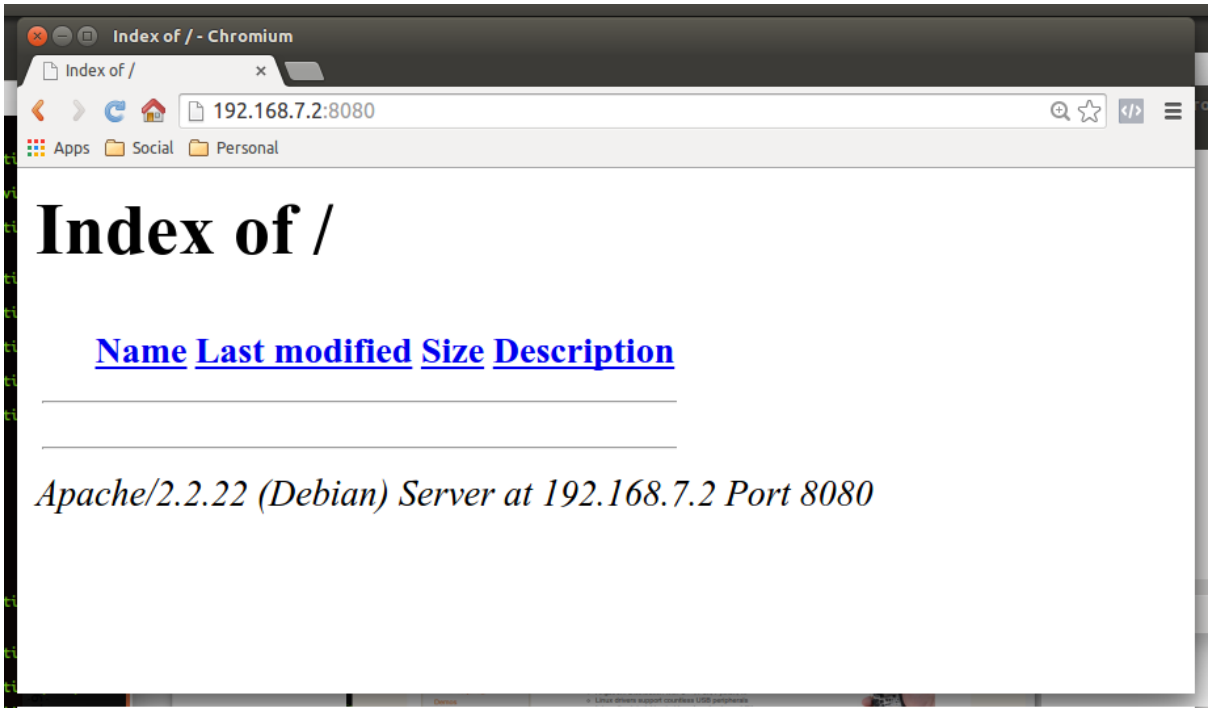
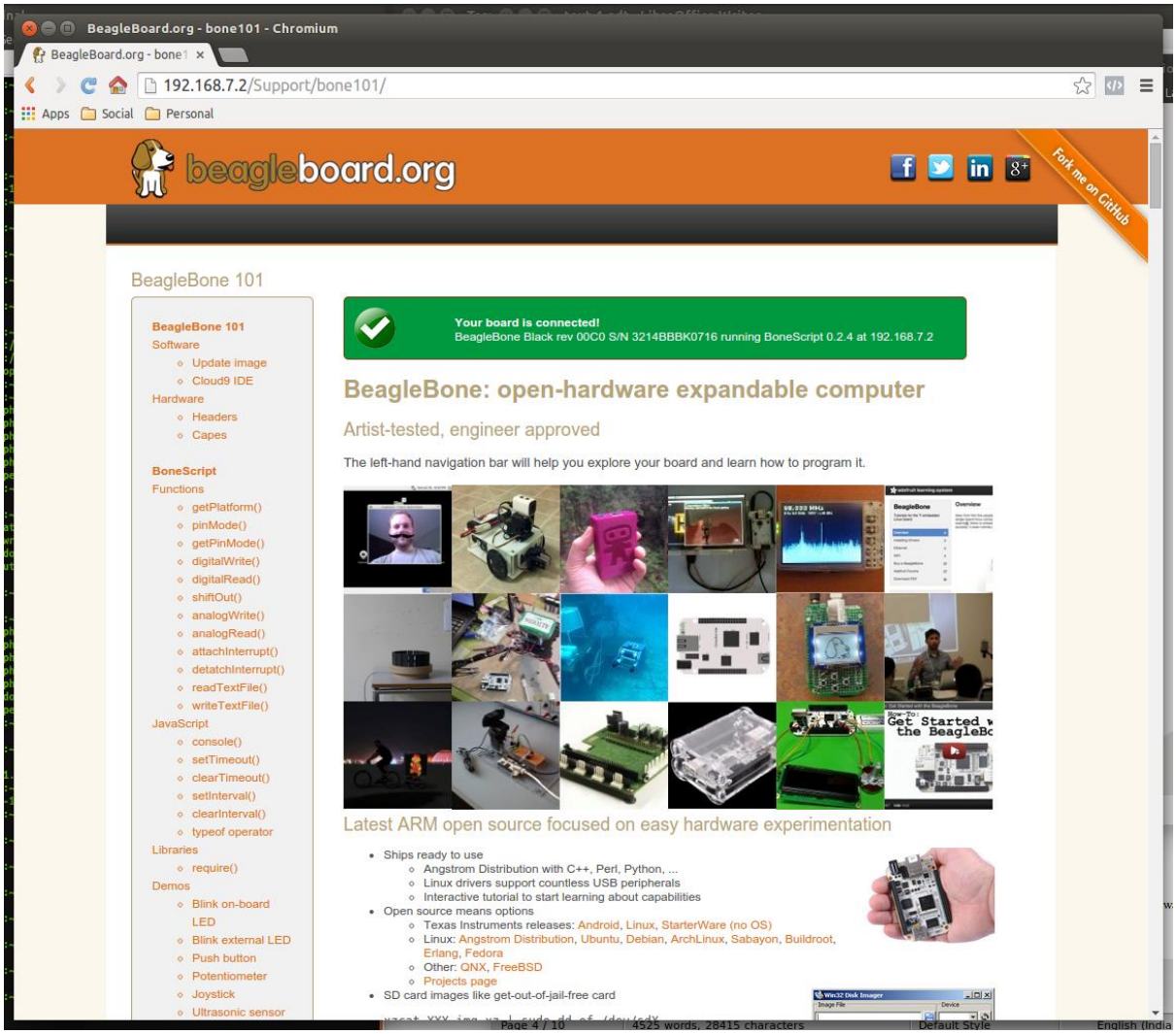
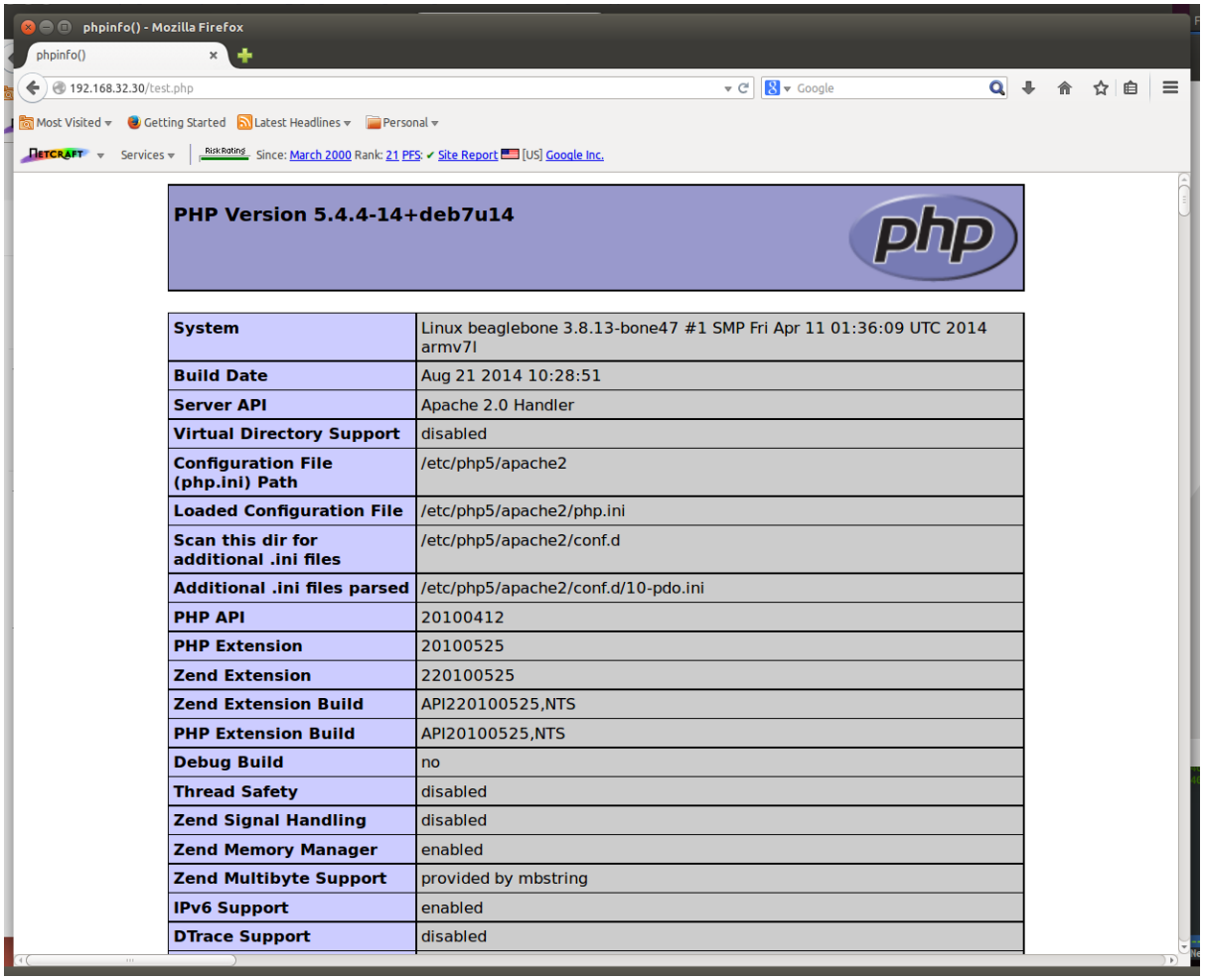
Chapter 1: Installing the Developing System





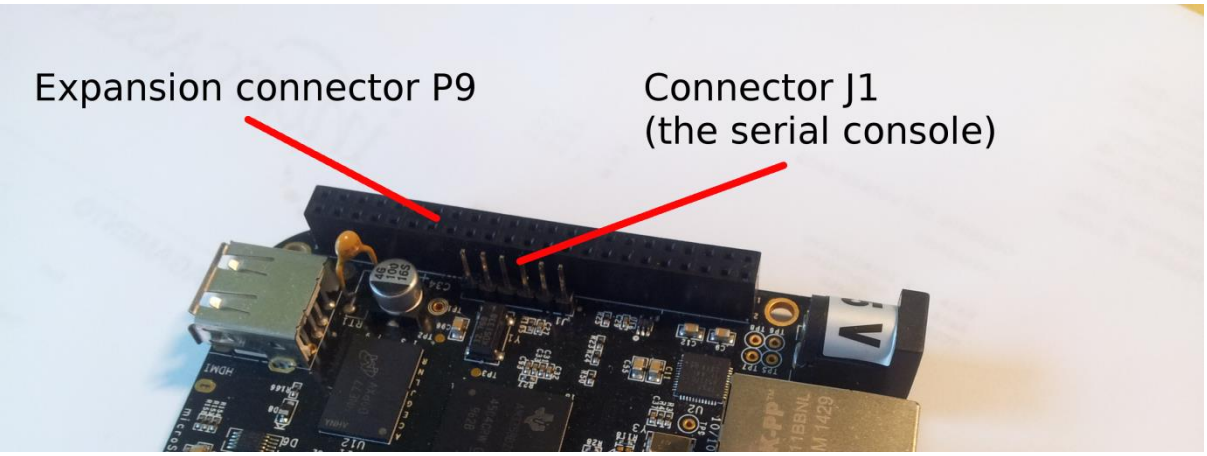

Index of / - Chromium
Index of /
192.168.7.2:8080
Apps
Social
Personal
Index of /
Name Last modified Size Description
Apache/2.2.22 (Debian) Server at 192.168.7.2 Port 8080


BeagleBoard.org - bone101 - Chromium
BeagleBoard.org - bone1
192.168.7.2/Support/bone101/
Apps
Social
Personal
beagleboard.org
Fork me on GitHub
BeagleBone 101
BeagleBone 101
Software
Update image
Cloud9 IDE
Hardware
Headers
Capes
BoneScript
Functions
getPlatform()
pinMode()
getPinMode()
digitalWrite()
digitalRead()
shiftOut()
analogWrite()
analogRead()
attachInterrupt()
detatchInterrupt()
readTextFile()
writeTextFile()
JavaScript
console()
setTimeout()
clearTimeout()
setInterval()
clearInterval()
typeof operator
Libraries
require()
Demos
Blink on-board LED
Blink external LED
Push button
Potentiometer
Joystick
Ultrasonic sensor
Your board is connected!
BeagleBone Black rev 00C0 S/N 3214BBBK0716 running BoneScript 0.2.4 at 192.168.7.2
BeagleBone: open-hardware expandable computer
Artist-tested, engineer approved
The left-hand navigation bar will help you explore your board and learn how to program it.
Latest ARM open source focused on easy hardware experimentation
Ships ready to use
Angstrom Distribution with C++, Perl, Python, ...
Linux drivers support countless USB peripherals
Interactive tutorial to start learning about capabilities
Open source means options
Texas Instruments releases: Android, Linux, StarterWare (no OS)
Linux: Angstrom Distribution, Ubuntu, Debian, ArchLinux, Sabayon, Buildroot, Erlang, Fedora
Other: QNX, FreeBSD
Projects page
SD card images like get-out-of-jail-free card
Page 4 / 10
4525 words, 28415 characters
Default Style
English (India



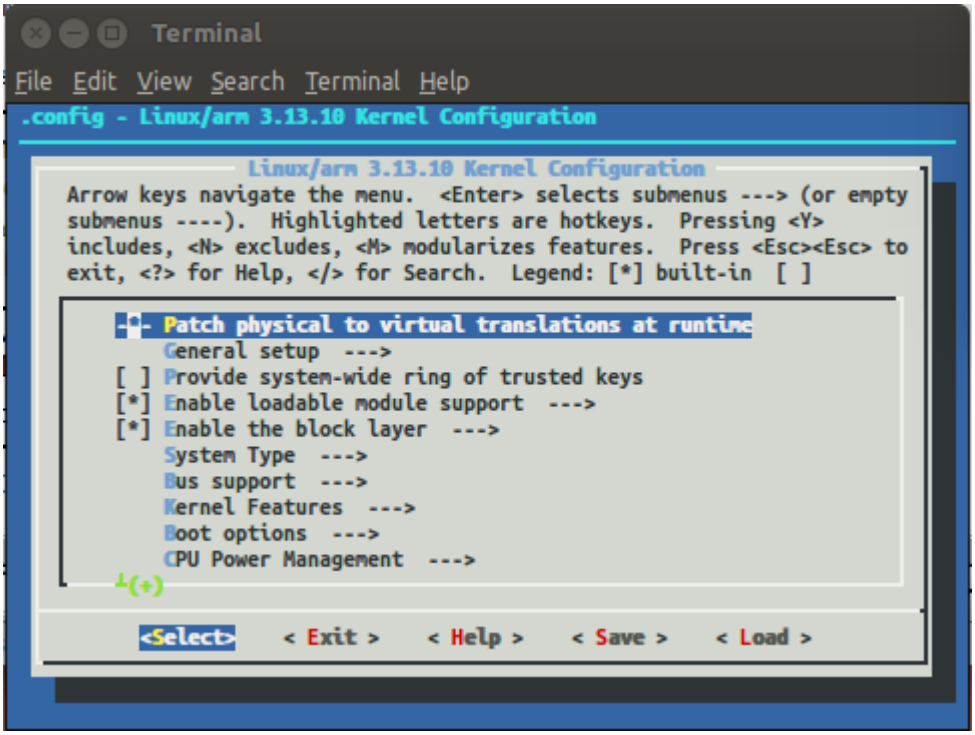
System	Linux beaglebone 3.8.13-bone47 #1 SMP Fri Apr 11 01:36:09 UTC 2014 armv7l
Build Date	Aug 21 2014 10:28:51
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc/php5/apache2
Loaded Configuration File	/etc/php5/apache2/php.ini
Scan this dir for additional .ini files	/etc/php5/apache2/conf.d
Additional .ini files parsed	/etc/php5/apache2/conf.d/10-pdo.ini
PHP API	20100412
PHP Extension	20100525
Zend Extension	220100525
Zend Extension Build	API220100525,NTS
PHP Extension Build	API20100525,NTS
Debug Build	no
Thread Safety	disabled
Zend Signal Handling	disabled
Zend Memory Manager	enabled
Zend Multibyte Support	provided by mbstring
IPv6 Support	enabled
DTrace Support	disabled

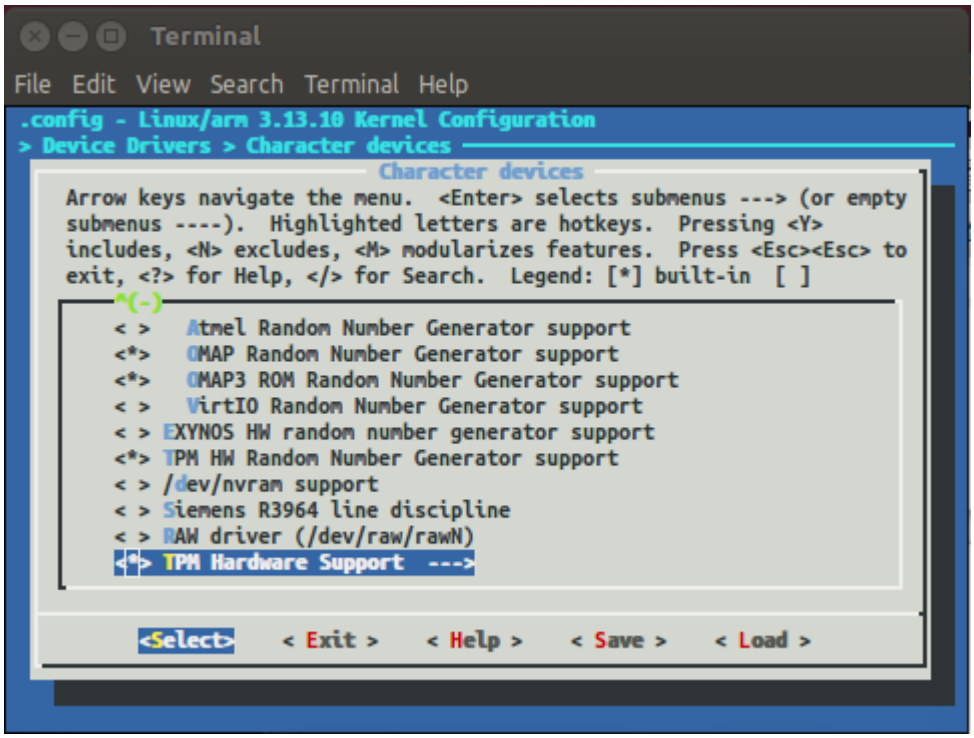
Chapter 2: Managing the System Console



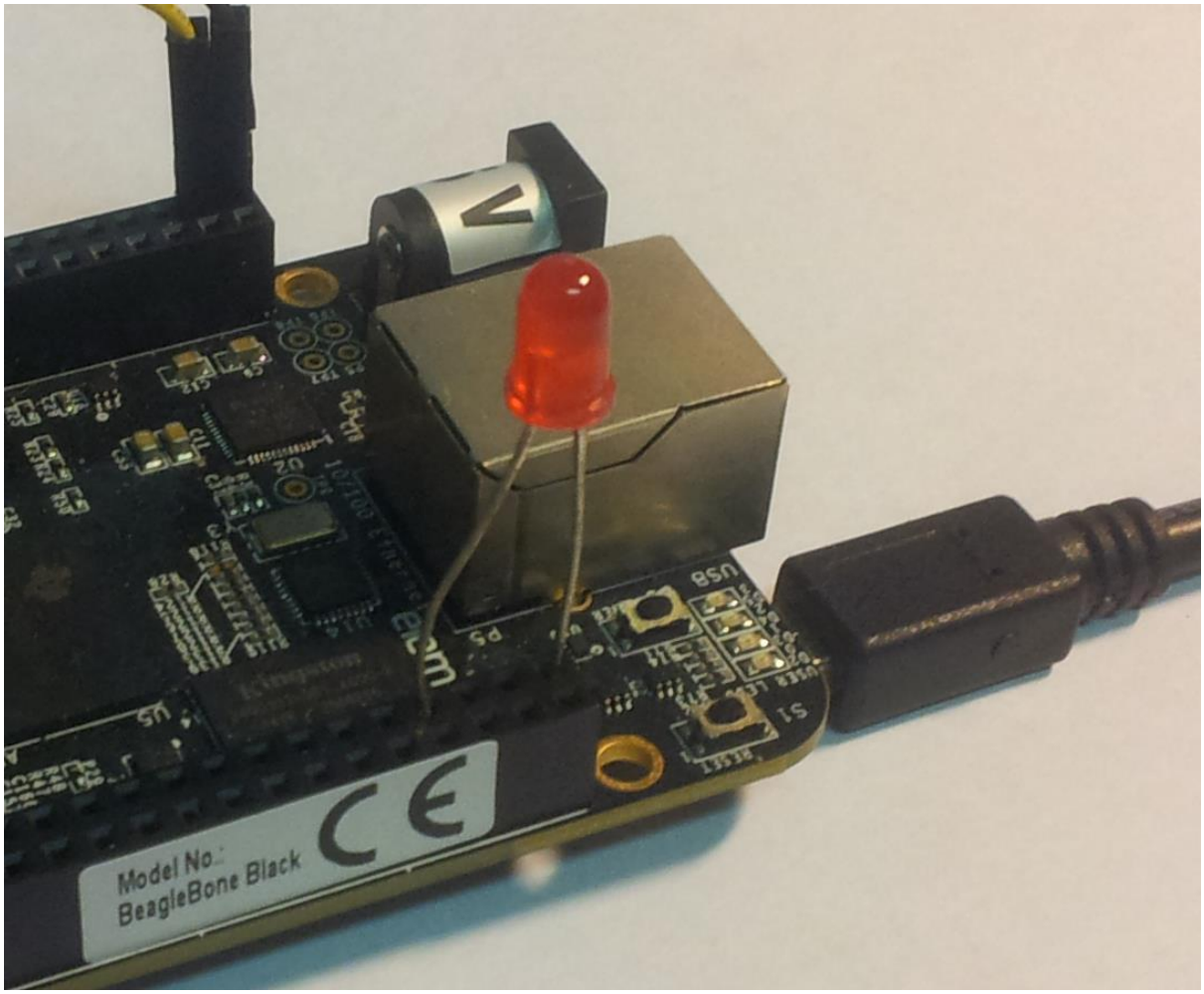

R1
P1
C2
C4
P2
VCC TX RX GND

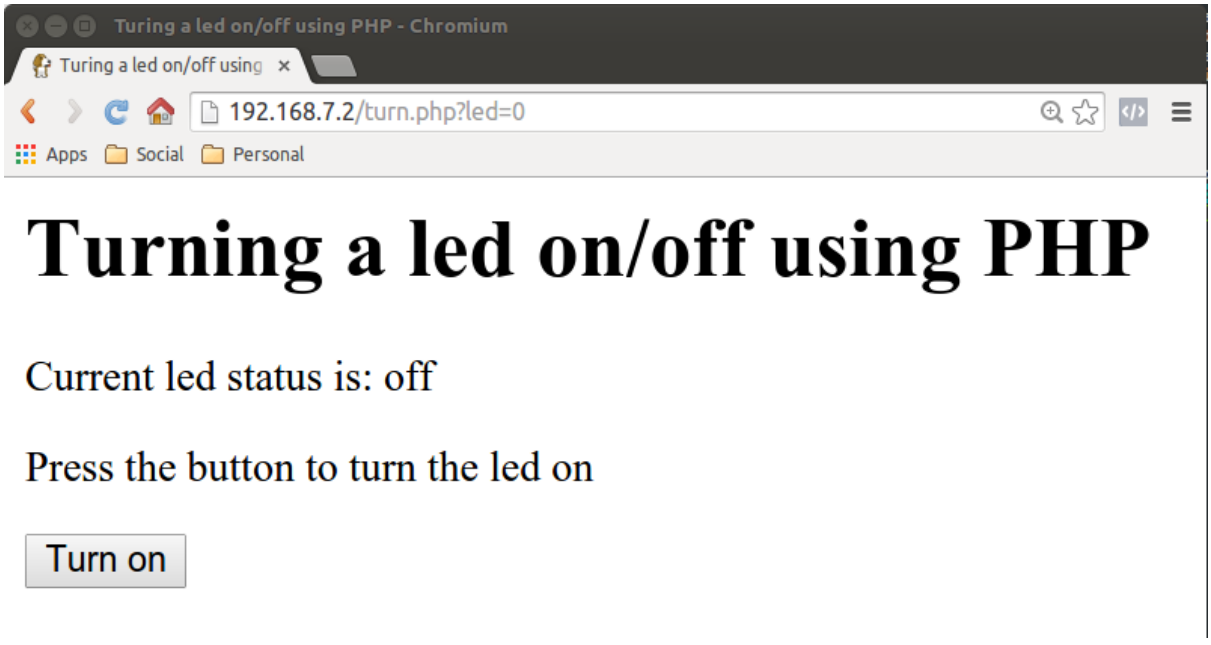
Chapter 3: Compiling versus Cross-compiling

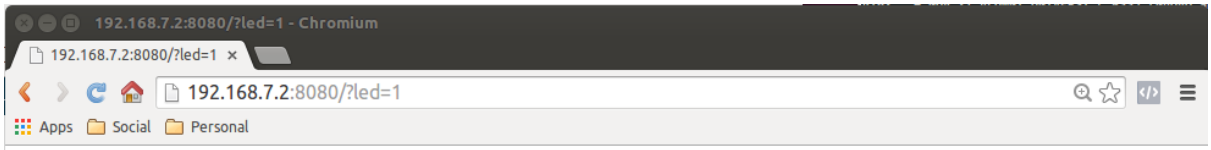




Chapter 4: Quick Programming with Scripts





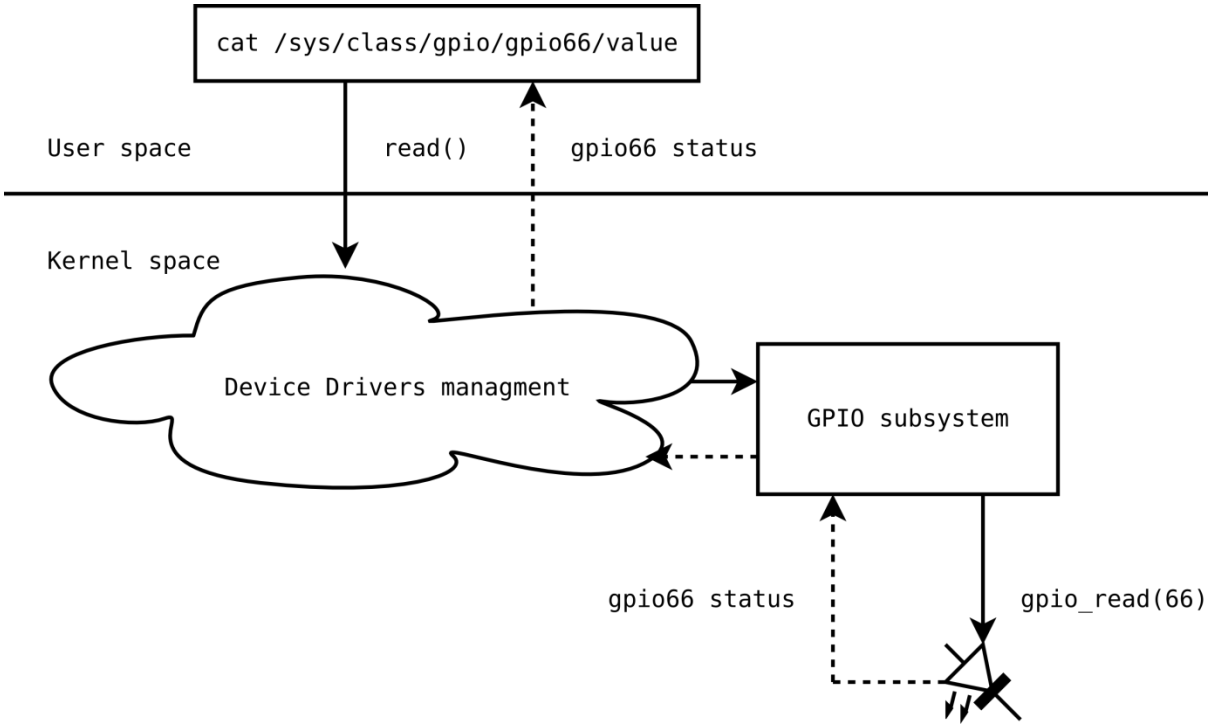



```
CLIENT VALUES
client_address -> ('192.168.7.1', 45170) (hulk.local)
command -> GET
path -> /?led=1
real path -> t/
query -> led=1
request_version -> HTTP/1.1

SERVER VALUES
server_version -> BaseHTTP/0.3
sys_version -> Python/2.7.3
protocol_version -> HTTP/1.0

HEADERS RECEIVED
accept ->
text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;
q=0.8
accept-encoding -> gzip,deflate,sdch
accept-language -> en-US,en;q=0.8,it;q=0.6
cache-control -> max-age=0
connection -> keep-alive
host -> 192.168.7.2:8080
referer -> http://192.168.7.2:8080/?led=0
user-agent -> Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36
(KHTML, like Gecko) Ubuntu Chromium/38.0.2125.111
Chrome/38.0.2125.111 Safari/537.36
```

Chapter 5: Device Drivers

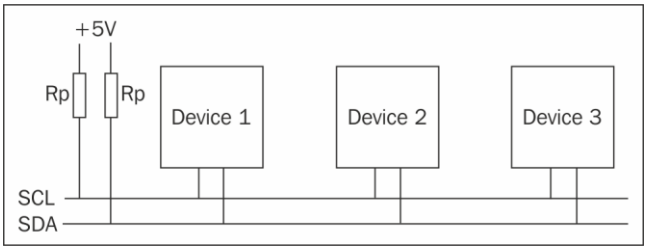


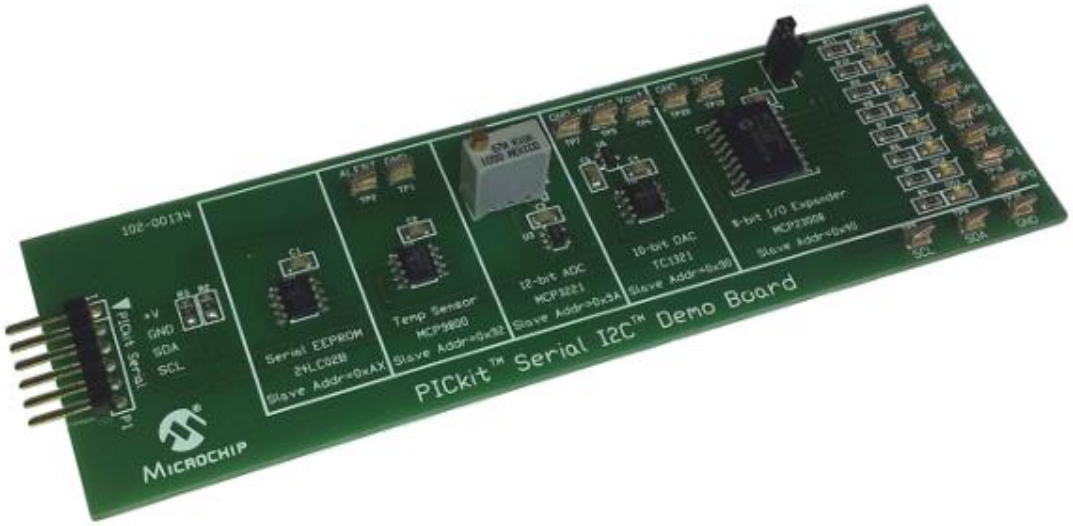
Chapter 6: Serial Ports and TTY Devices

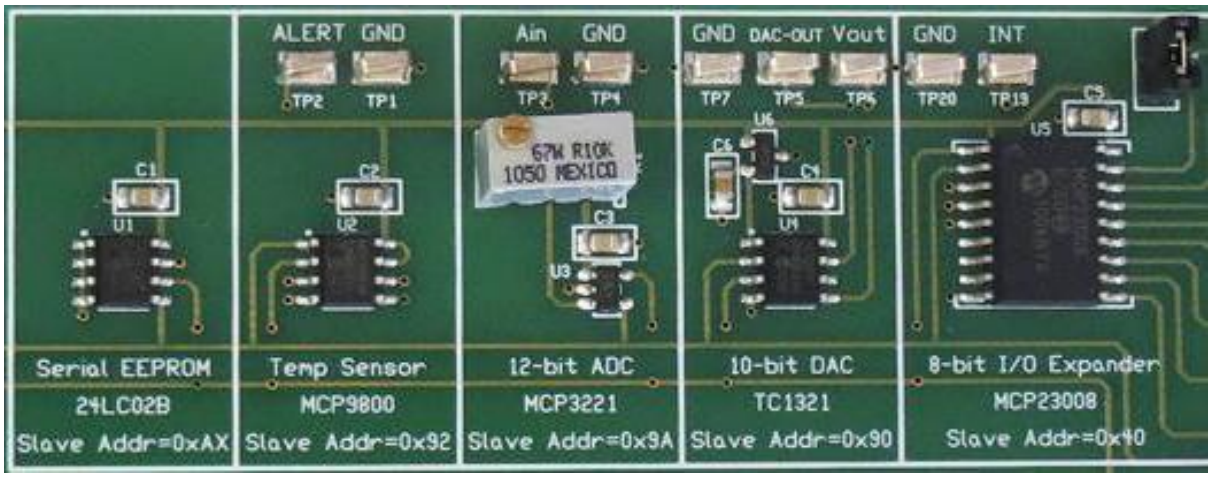
Chapter 7: Universal Serial Bus – USB

Test Barcode

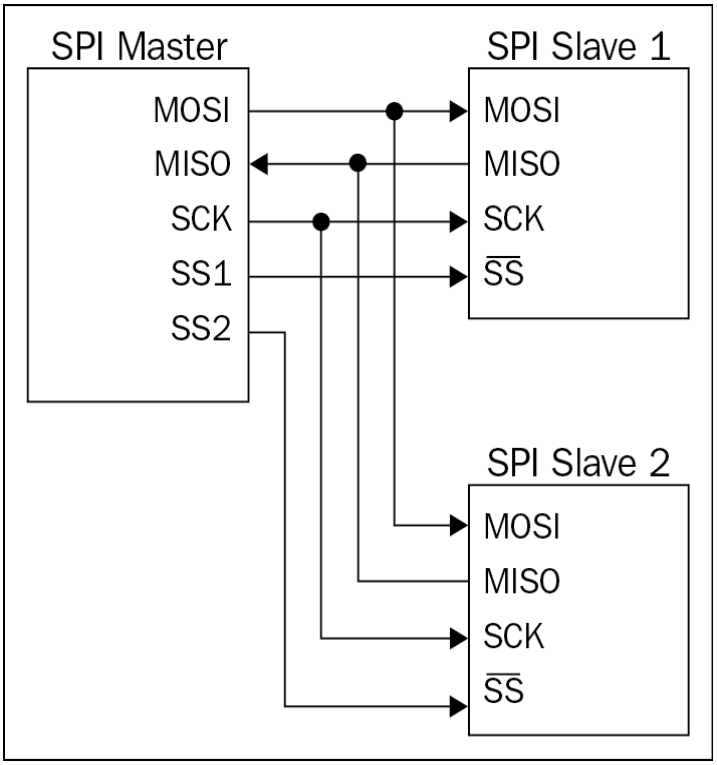
Chapter 8: Inter-integrated Circuit – I^2C

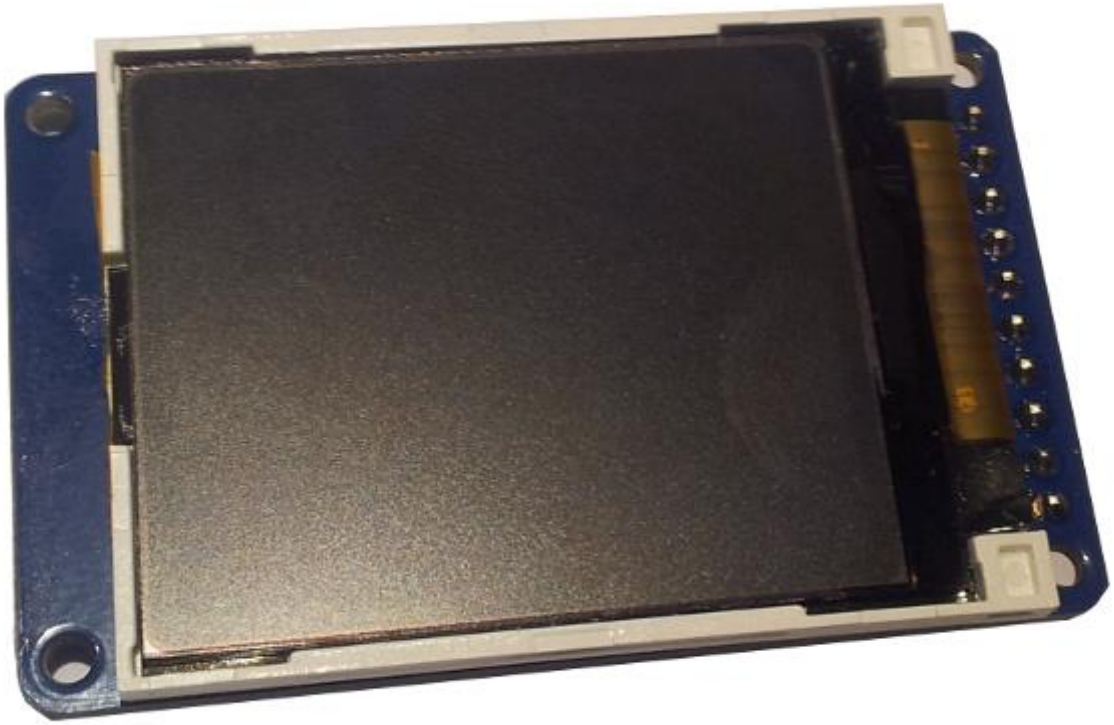


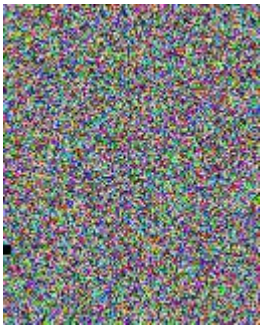


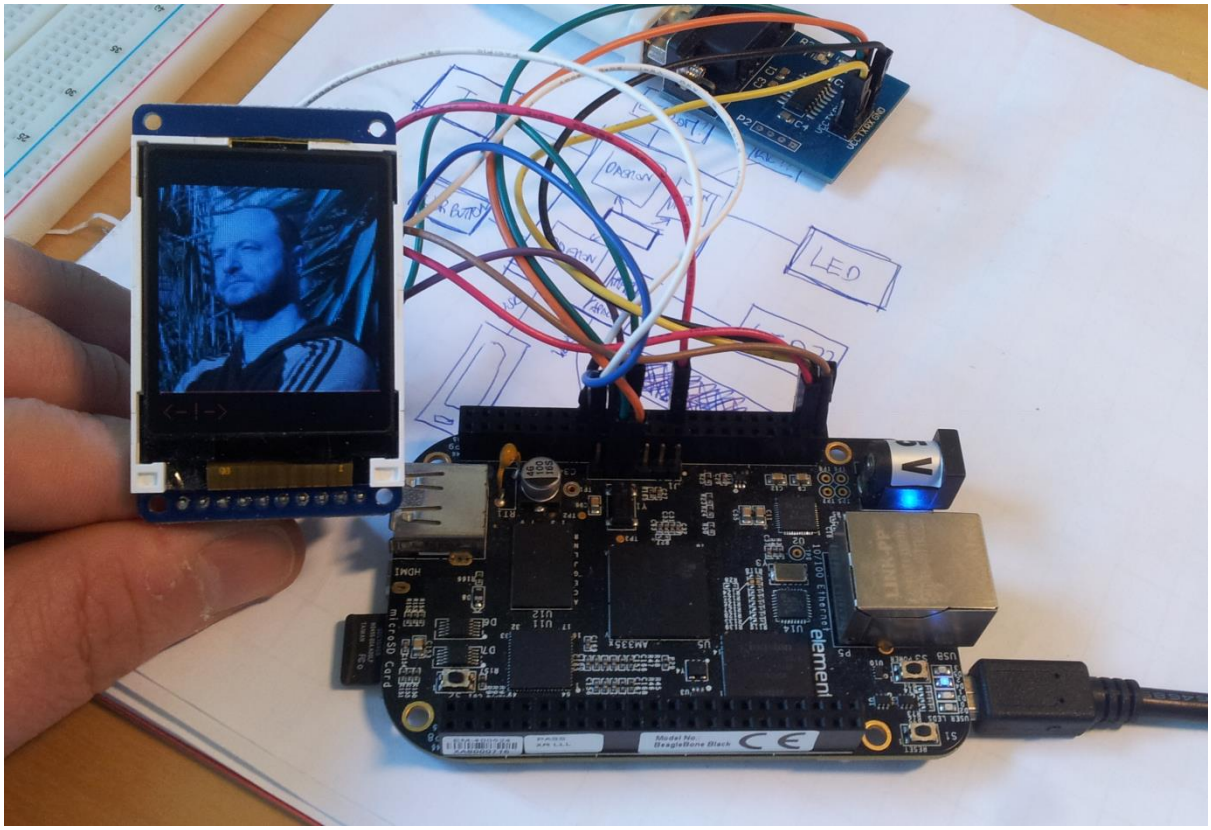


Chapter 9: Serial Peripheral Interface – SPI



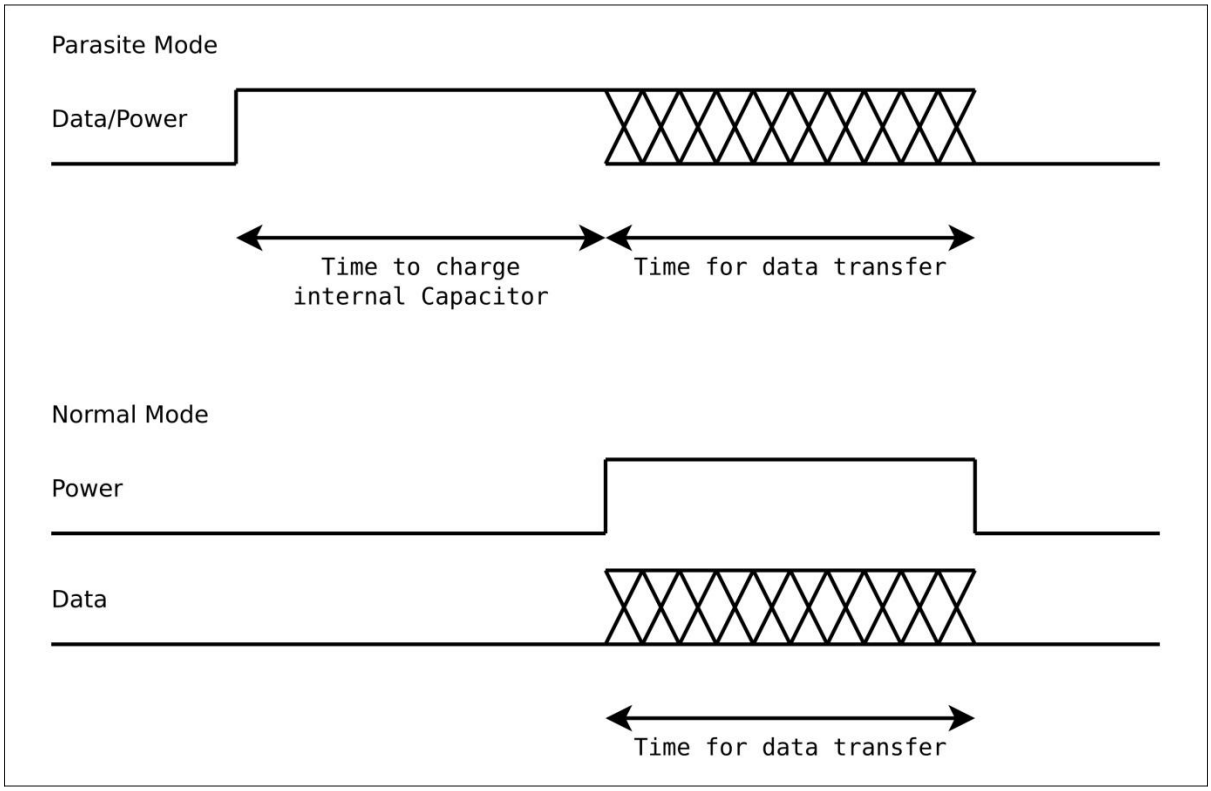


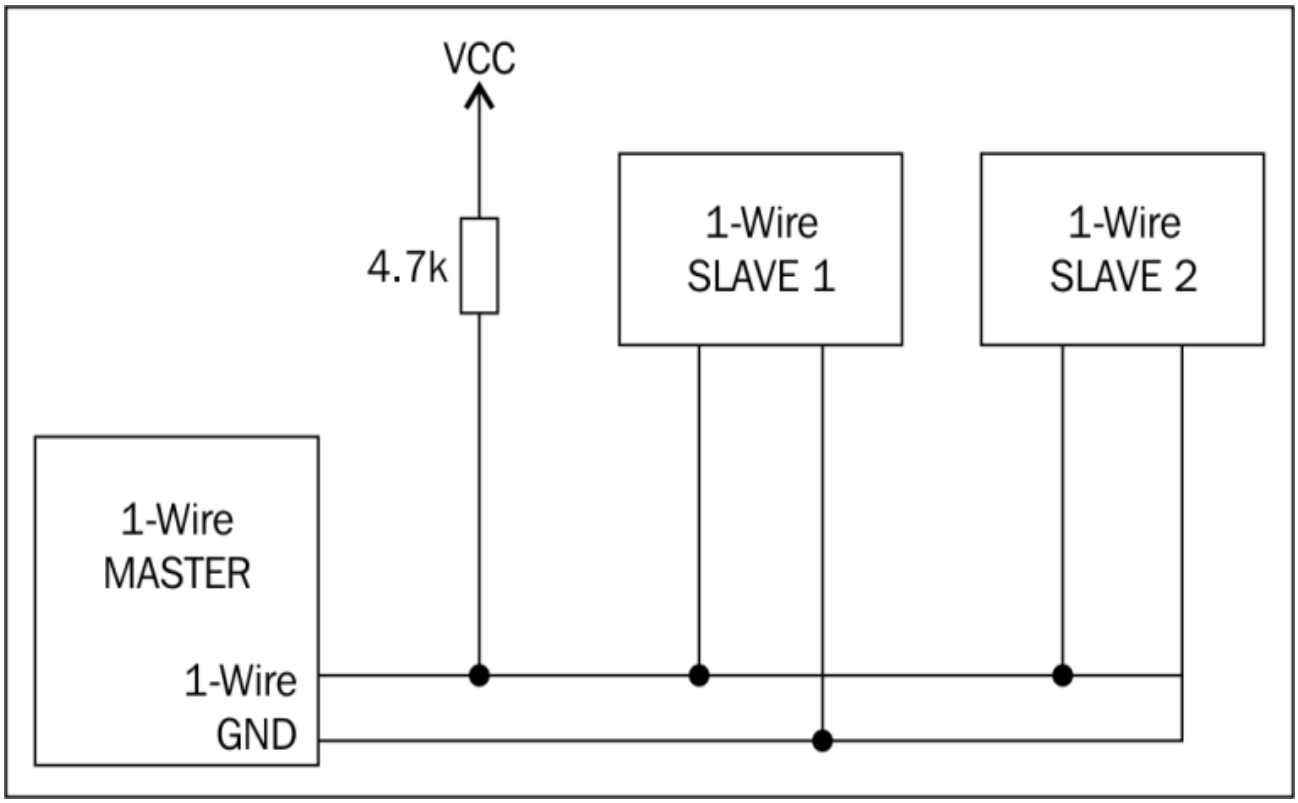



LED
element14
microSD Card
HDMI


MAX31855
Thermocouple
Digital
OMEGA®
K
+
J1
J2
C2
U1
D1
MAXIM

Chapter 10: 1-Wire Bus – W1





Standard case Waterproof case