1. Update/Upgrade the Pi

sudo -i

apt-get --yes update && apt-get --yes dist-upgrade && dpkg -l 'linux-\*' | sed '/^ii/!d;/'"$(uname -r | sed "s/\(.\*\)-\([^0-9]\+\)/\1/")"'/d;s/^[^ ]\* [^ ]\* \([^ ]\*\).\*/\1/;/[0-9]/!d' | xargs sudo apt-get -y purge && apt-get --yes autoremove && reboot

2. Make sure the IC2 access is enabled using sudo raspi-config

3. Install i2c-tools, SMBUS. Then ic2test for temp unit

cd ~

sudo apt-get --yes install i2c-tools python-smbus snmpd snmp sshpass

Check for temp chip:

i2cdetect -y 1

0 1 2 3 4 5 6 7 8 9 a b c d e f

00: -- -- -- -- -- -- -- -- -- -- -- -- --

10: -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --

20: -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --

30: -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --

40: -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --

50: -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --

60: -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --

70: -- -- -- -- -- -- 76 --

Adafruit will return 77 and Chinese version will return 76

4. Allow SNMP user access to I2C

sudo adduser snmp i2c

5. Copy PiT files:

sudo mkdir /usr/local/bin/PiT

Change ownership on /usr/local/bin

sudo chown pi /usr/local/bin

sudo chown pi /usr/local/bin/PiT

SFTP tar file to directory on Pi

F:\Programs\Raspberry Pi\PiT\280\source\usr\local\bin\2017-06-20-bin.tar.gz

Unpack .tar file to: /usr/local/bin

sudo tar -zxvf 2017-06-20-bin.tar.gz -C /usr/local/bin/PiT

6. Change rights on /usr/local/bin

sudo chown pi /usr/local/bin

7. Change rights on .SH files

sudo chmod u+x /usr/local/bin/PiT/\*.sh

8. SFTP tar file to directory on Pi

F:\Programs\Raspberry Pi\PiT\280\source\usr\local\bin\2017-06-20-egg.tar.gz

Unpack .tar file to /usr/local/lib/python2.7/dist-packages

sudo tar -zxvf 2017-06-20-egg.tar.gz -C /usr/local/lib/python2.7/dist-packages

9. Test .py files

Chinese Chip

sudo python /usr/local/bin/PiT/snmp-temp-c.py 0x76

sudo python /usr/local/bin/PiT/snmp-humd.py 0x76

Adafruit Chip

sudo python /usr/local/bin/PiT/snmp-temp-a.py 0x77

sudo python /usr/local/bin/PiT/snmp-humd.py 0x77

10. Change SNMPD config file to allow connections

sudo nano /etc/snmp/snmpd.conf

Comment out by adding # to front of line:

agentAddress udp:127.0.0.1:161

add:

agentAddress udp:161

Below the line:

#rocommunity public localhost

add:

rocommunity public

Below the line:

# "Pass-through" MIB extension command

Add the following:

Raspberry Pi CPU Temp

pass .1.3.6.1.2.1.25.1.20 /bin/sh /usr/local/bin/cpu-temp.sh

For Adafruit Chips use the "-a" files

pass .1.3.6.1.2.1.25.1.8 /bin/sh /usr/local/bin/PiT/snmp-temp-a.sh

pass .1.3.6.1.2.1.25.1.9 /bin/sh /usr/local/bin/PiT/snmp-humd-a.sh

For Chinese Chips use the "-c" files

pass .1.3.6.1.2.1.25.1.8 /bin/sh /usr/local/bin/PiT/snmp-temp-c.sh

pass .1.3.6.1.2.1.25.1.9 /bin/sh /usr/local/bin/PiT/snmp-humd-c.sh

pass .1.3.6.1.2.1.25.1.10 /bin/sh /usr/local/bin/PiT/snmp-baro-c.sh

11. Restart the SNMP daemon:

sudo service snmpd restart

12. Test SNMP by:

snmpget -v2c -cpublic localhost .1.3.6.1.2.1.25.1.8

snmpget -v2c -cpublic localhost .1.3.6.1.2.1.25.1.9

snmpget -v2c -cpublic localhost .1.3.6.1.2.1.25.1.10

13. Reboot the Pi!

sudo reboot