PoE Configuration

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> PoE commands are only supported on PoE enabled devices. Currently, of the devices on our Hardware compatibility list, only the AS4610-54P and the AS4610-30P are PoE enabled.

Show Help Information

```
root@XorPlus$./poe_tool -help
```

Show Version Information

```
root@XorPlus$./poe_tool -v
```

Key Words

Key words contain "-o, -p, -P". Meanings of these suffixes are as follows:

-o refers to operation code (key). It is a hexadecimal number, such as 0x19.
-p refers to port number. Port numbers range from 0 to 48. When p is 0, all ports are referred to.
-P refers to parameters. Three is the maximum number of parameters. Multiple parameters should be separated by semicolons. (e.g. p1:p2:p3).

PSE Function Enable

Key:0x00

The number of parameter is 1. The values range from 0 to 3.
0: disable pse
1: enable pse
2: force power
3: reserved

Configure enable pse for all ports:

```
root@XorPlus$./poe_tool -o 0x00 -p 0 -P 1
```

Configure force power for port 1:

```
root@XorPlus$./poe_tool -o 0x00 -p 1 -P 2
```

Configure fail returns:

Port xx PSE function enable/disable/set force power failed

Configure success returns
Port xx PSE function enable/disable/set force power success

If user selects parameter 3, nothing is returned.

Powerup Command

Key:0x01

The number of parameter is 1. The values range from 0 to 1.
0disallow powerup
1allow powerup

Configure disallow powerup for all ports:

```
root@XorPlus$./poe_tool -o 0x01 -p 0 -P 0
```

Configure allow powerup for port 32:

```
root@XorPlus$./poe_tool -o 0x01 -p 32 -P 1
```

Configure fail returns:
Port xx set powerup/powerdown fail

Configure success returns
Port xx set powerup/powerdown success

Logical Port Map Enable

Key:0x02
The number of parameter is 1. The values range from 0 to 1.
0disallow logical port map
1allow logical port map

Configure disallow logical port map:

```
root@XorPlus$./poe_tool -o 0x02 -P 0
```

Configure allow logical port map:

```
root@XorPlus$./poe_tool -o 0x02 -P 1
```

Configure fail returns:
Enable/Disable logical port map fail

Configure success returns
Enable/Disable logical port map success

Reset the Specified Port or Ports

Key:0x03
The number of parameter is 1. The values range from 0 to 1.
0: do not reset the port
1: reset the port

Configure reset port 1:

```
root@XorPlus$./poe_tool -o 0x03 -p 1 -P 1
```

Configure reset all ports:

```
root@XorPlus$./poe_tool -o 0x03 -p 0 -P 1
```

Configure fail returns:
Reset port xx fail

Configure success returns
Reset port xx success

If user selects parameter 0, nothing is returned.

Reset the Error Statistics on Specified Ports

Key:0x05
The number of parameter is 1. The values range from 0 to 1.
0: don't reset the port error statistics
1: reset the port error statistics

Reset the error statistics on port 1:

```
root@XorPlus$./poe_tool -o 0x05 -p 1 -P 1
```

Reset the error statistics on all ports:

```
root@XorPlus$./poe_tool -o 0x05 -p 0 -P 1
```

Configure fail returns:
Port xx statistics reset fail

Configure success returns
Port xx statistics reset success

If user selects parameter 0, nothing is returned.

Set the PSE Functionality on all Ports

Key:0x06
The number of parameter is 1. The values range from 0 to 3.
0: disable PSE functionality on all ports
1: enable PSE functionality on all ports
2: enable force power functionality on all ports
3: enable force power disconnect functionality on all ports

Configure enable PSE functionality on all ports:

```
root@XorPlus$./poe_tool -o 0x06 -P 1
```

Configure fail returns:
Disable PSE functionality/Enable PSE functionality/Enable force power functionality/Enable force power with disconnect functionality on all ports fail

Configure success returns
Disable PSE functionality/Enable PSE functionality/Enable force power functionality/Enable force power with disconnect functionality on all ports success

Set the Default Maximum Allocated Power Parameters in High Power Mode on all Ports in the PoE Subsystem

Key:0x07
The number of parameters is 1. The values range from 0 to 3.
0: 22.5W
1: 26.5W
2: 31.2W
3: 37 W

Configure default maximum. Allocated power is 26.5W in high power mode on all ports in the PoE subsystem.

```
root@XorPlus$./poe_tool -o 0x07 -P 1
```

Configure fail returns:
Set default maximum allocated power on all ports fail

Configure success returns
Set default maximum allocated power on all ports success

The Switch Port from Low Power Mode to High Power Mode

Key:0x08
The number of parameter is 1. The values range from 0 to 1.
0:switch the port from low power to high power
1:ignore

Configure all switch port from low power mode to high power mode.

```
root@XorPlus$./poe_tool -o 0x08 -p 0 -P 0
```

Configure fail returns:
set port xx to <high power mod> fail

Configure success returns
set port xx to <high power mod> success

If user selects parameter 1, nothing is returned.

Reset the Entire PoE Subsystem

Key:0x09
The number of parameter is 1. The values range from 0 to 1.
0: ignore
1: reset the PoE subsystem

Configure reset the entire PoE subsystem.

```
root@XorPlus$./poe_tool -o 0x09 -P 1
```

Configure fail returns:
PoE reset fail

Configure success returns
PoE reset success

Global System Parameters Configuration Command

Key:0x0a
The number of parameter is 3.
parameter 1: UVLO (Under Voltage Lock Out,the values should be bigger than 33,recommended to choose 40)
parameter 2: 0-1 (0:disable double detection 1: enable double detection)
parameter 3: OVLO (Over Voltage Locked-out,the values should be bigger than 57,Recommended to choose 60)

Configure UVLO 40, enable double detection, OVLO 60.

```
root@XorPlus$./poe_tool -o 0x0a -P 40:1:60
```

Configure fail returns:
Global system parameters configuration: operation fail

Configure success returns
Global system parameters configuration: operation success

Configure Detection Type on Specified Ports

Key: 0x10
The number of parameter is 1. The values range from 0 to 6.
0: no detection
1: Legacy Capacitive Detection only
2: IEEE 802.3af 4-Point Detection only
3: IEEE 802.3af 4-Point followed by Legacy
4: IEEE 802.3af 2-Point Detection
5: IEEE 802.3af 2-Point followed by Legacy
6: Reserved

Configure no detection for all port:

```
root@XorPlus$./poe_tool -o 0x10 -p 0 -P 0
```

Configure fail returns:
Port xx set detection type to <detection type> fail

Configure success returns:
Port xx set detection type to <detection type> success

Configure the Classify Type on Specific Ports

Key: 0x11
The number of parameters is 1. The values range from 0 to 1.
0: bypass classification
1: enable classification

Configure enable classification for all ports:

```
root@XorPlus$./poe_tool -o 0x11 -p 0 -P 1
```

Configure fail returns:
Port xx bypass/enable classification configuration fail

Configure success returns:
Port xx bypass/enable classification configuration success

Configure Auto Mode on Specific Ports

Key: 0x12
The number of parameter is 1. The values range from 0 to 1.
0: disable auto mode
1: enable auto mode

Configures auto mode on all ports:

```
root@XorPlus$./poe_tool -o 0x12 -p 0 -P 1
```

Configure fail returns:
Disable/enable port xx auto power-up mode fail

Configure success returns:
Disable/enable port xx auto power-up mode success

Configure Disconnect Type on Specific Ports

Key :0x13
The number of parameter is 1. The values range from 0 to 3.
0: None
1: AC Disconnect
2: DC Disconnect
3: DC Disconnect with delay

Configure DC Disconnect for all ports:

```
root@XorPlus$./poe_tool -o 0x13 -p 0 -P 2
```

Configure fail returns:
Port xx set disconnect type to <disconnect type> fail

Configure success returns:
Port xx set disconnect type to <disconnect type> success

Configure Power Threshold Type on Specified Ports

Key:0x15
The number of parameter is 1. The values range from 0 to 2.
0: None
1: Class Based
2: User defined

Configure Class Based for all ports:

```
root@XorPlus$./poe_tool -o 0x15 -p 0 -P 1
```

Configure fail returns:
Port xx set power threshold type to <power threshold type> fail

Configure success returns:
Port xx set power threshold type to <power threshold type> success

Configure Max Threshold on Specific Ports

Key:0x16
The number of parameter is 1. The values should not be greater than 30.

Configure max threshhold 10 for port 1:

```
root@XorPlus$./poe_tool -o 0x16 -p 1 -P 10
```

Configure fail returns:
Port xx power threshold set to <max threshold> W fail

Configure success returns:
Port xx power threshold set to <max threshold> W success

Configure Power Management Mode

Key:0x17
The number of parameter is 1. The values range from 0 to 4.
0: None
1: Static Power Management with Port Priority
2: Dynamic Power Management with Port Priority
3: Static Power Management without Port Priority
4: Dynamic Power Management without Port Priorit

Configure Static Power Management with Port Priority:

```
root@XorPlus$./poe_tool -o 0x17 -P 1
```

Configure fail returns:
Set power management mod to <power management mode> fail

Configure success returns:
Set power management mod to <power management mode> success

Configure Power Supply Details for Each Combination of the MPSS Pins

Key:0x18
The number of parameter is 3.
parameter 1: multi power source status pin combination,the values from 0 to 7.
parameter 2: total power. the values from 0 to 1600.
parameter 3: Guard band (recommend 10 percent of total power)

Configure power supply details for each combination of the mpss pins:

```
root@XorPlus$./poe_tool -o 0x18 -P 0:100:10
```

Configure fail returns:
Config power supply to PoE system fail

Configure success returns:
Config power supply to PoE system success

Configure Port Priority on Specific Ports

Key: 0x1a
The number of parameter is 1. The values range from 0 to 3.
0: low
1: medium
2: high
3: critical

Configure critical priority for port 1:

```
root@XorPlus$./poe_tool -o 0x1a -p 1 -P 3
```

Configure fail returns:
Port xx port priority configuration set to <port priority> fail

Configure success returns:
Port xx port priority configuration set to <port priority> success

Configures Port Power Up Mode

Key: 0x1c
The number of parameter is 1. The values from 0 to 3.

0: IEEE 802.3af mode
1: high inrush mode
2: pre-IEEE 802.3at
3: IEEE 802.3at mode

Configure:

```
root@XorPlus$./poe_tool -o 0x1c -p 0 -P 0
```

Configure fail returns:
Port xx set power up mod fail

Configure success returns:
Port xx set power up mod success

Configure the Per Port Power Disconnect Mask

Key: 0x1e
The number of parameter is 1. The values range from 0 to 255.

Configure power disconnect mask 17 for all ports

```
root@XorPlus$./poe_tool -o 0x1e -p 0 -P 17
```

Configure fail returns:
Port xx power disconnect mask configuration fail

Configure success returns:
Port xx power disconnect mask configuration success

Acquire Port Status

Key: 0x21
The number of parameter is 0.

Acquire port 1 status:

```
root@XorPlus$./poe_tool -o 0x21 -p 1
```

Return port status

Acquires the Total Power Allocated

Key: 0x23
The number of parameter is 0.

Acquires the total power allocated:

```
root@XorPlus$./poe_tool -o 0x23
```

Return:
Total power allocated to the ports is xx W. Power available is xx W.