AMSIO PoE Manager

Management Software

User's Manual

Revision History

Version	Revision Date	Author	Description
1.0	2020/09/24	Mario	- 1st release

Table of Contents

Revision History ii
Chapter 1 Introduction 1
Chapter 2 AMSIO PoE Manager 2
2.1 Menu Bar 3
2.1.1 File 3
2.2 Menu List 4
2.3 Features 5
2.3.1 Information 5
2.3.2 Control 7

Chapter 1
Introduction

AMSIO PoE Manager is a highly integrated software management system that provides an easy-to-use application programming interface.

Software Structure

AMSIO PoE Manager is an intelligent software tool to manage PoE (Power over Ethernet) devices, ranging from physical layer connectivity and communication layer protocol to middleware API and high level software for management. AMSIO PoE Manager is ideal for integration with specific embedded systems, with powerful and useful PoE managerial abilities suited for various vertical applications.

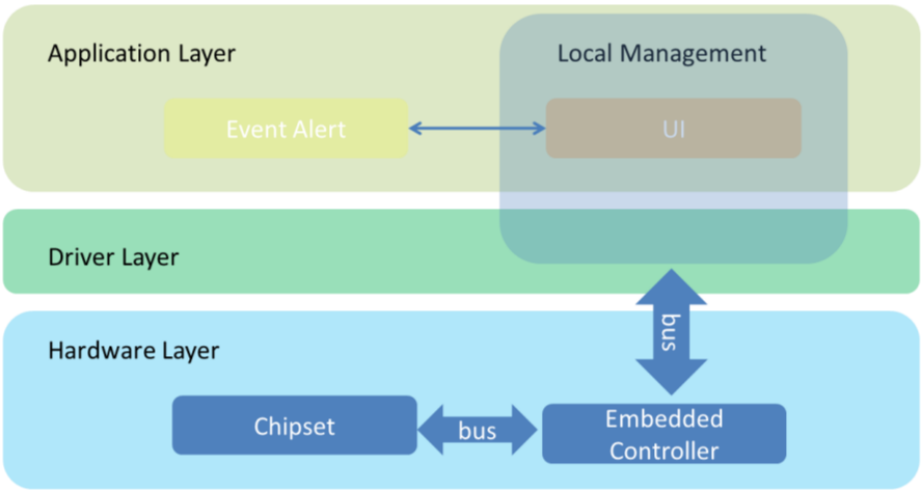

Figure 1: Layer structure

Chapter 2
AMSIO PoE Manager

AMSIO PoE Manager is a software program that helps to monitor and manage PoE (Power over Ethernet) operations. The major task of PoE manager is to routinely monitor each PoE port's power consumption and status. If any problem happens to a port, it will display info imagery for the user.

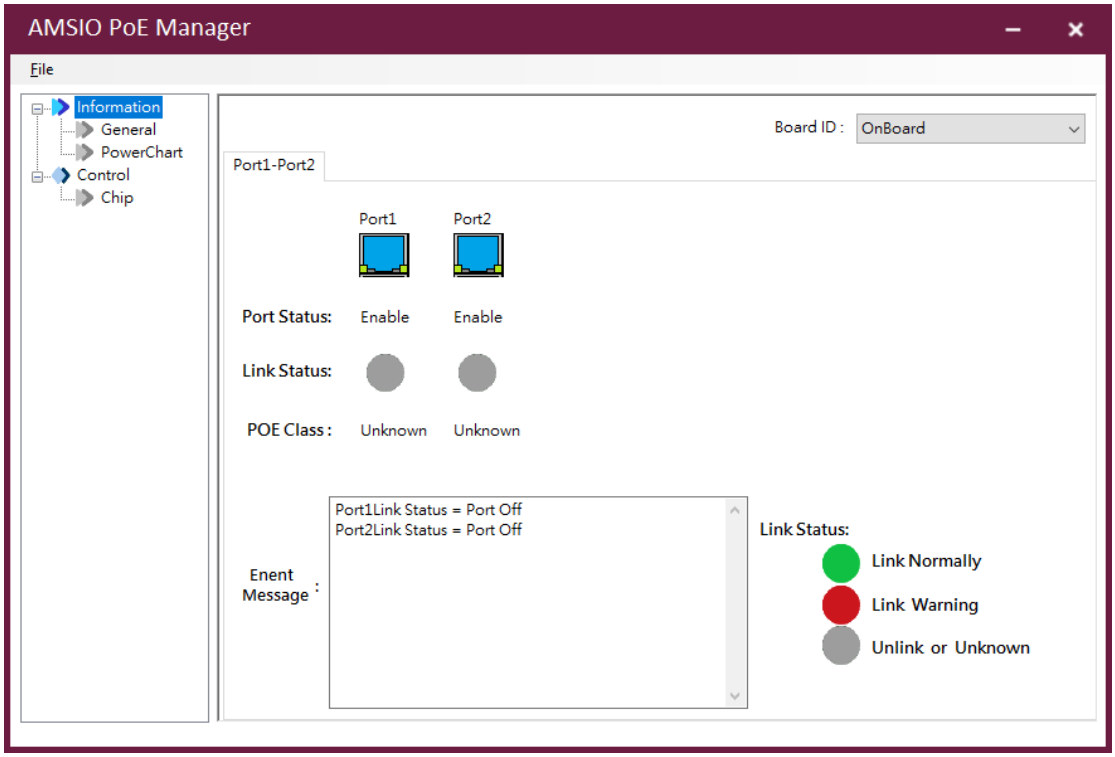

Figure2: PoE Manager interface

2.1 Menu Bar

On the top of the main screen is the menu bar. Select any of the items in this bar to go to the submenus.

2.1.1 File

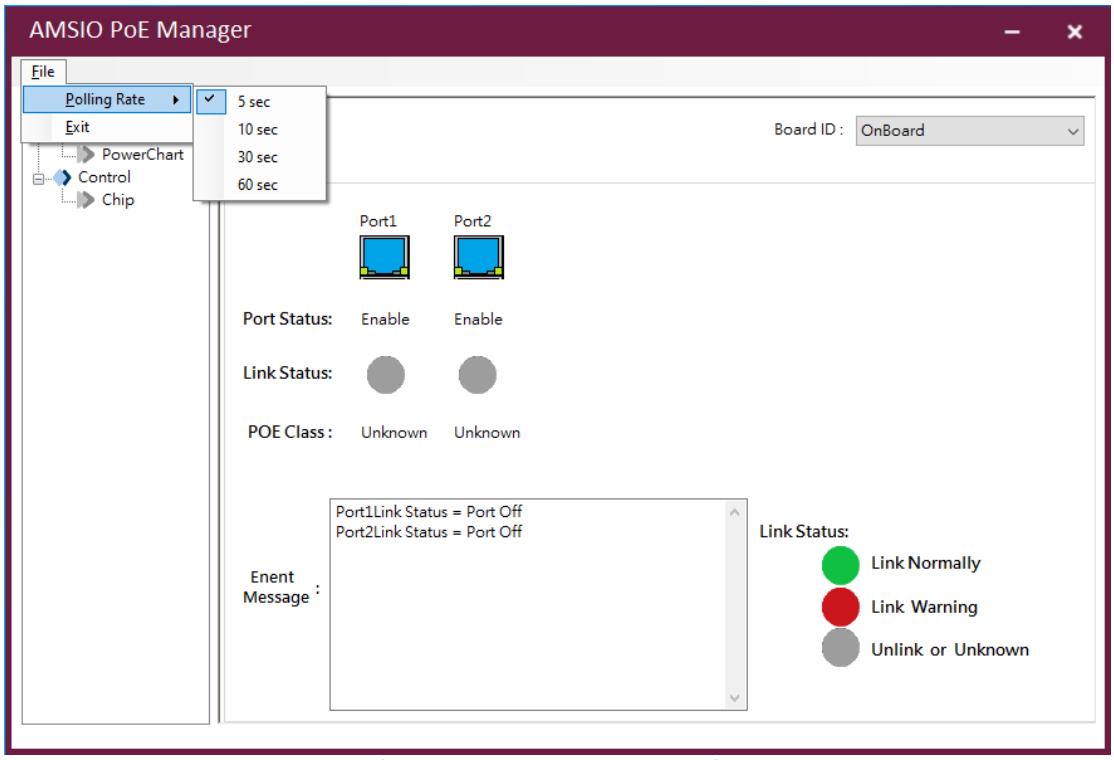

Figure3: PoE Manager menu bar

Polling Rate

Set the polling rate to monitor PoE power consumption and port status. Polling rates include the following:

- 5 Sec
- 10 Sec
- 30 Sec
- 60 Sec

Exit

Close the PoE manager program.

2.2 Menu List

The menu list is located on the left frame of the screen and contains all monitoring and control functions. It has two submenus: "Information" and "Control".

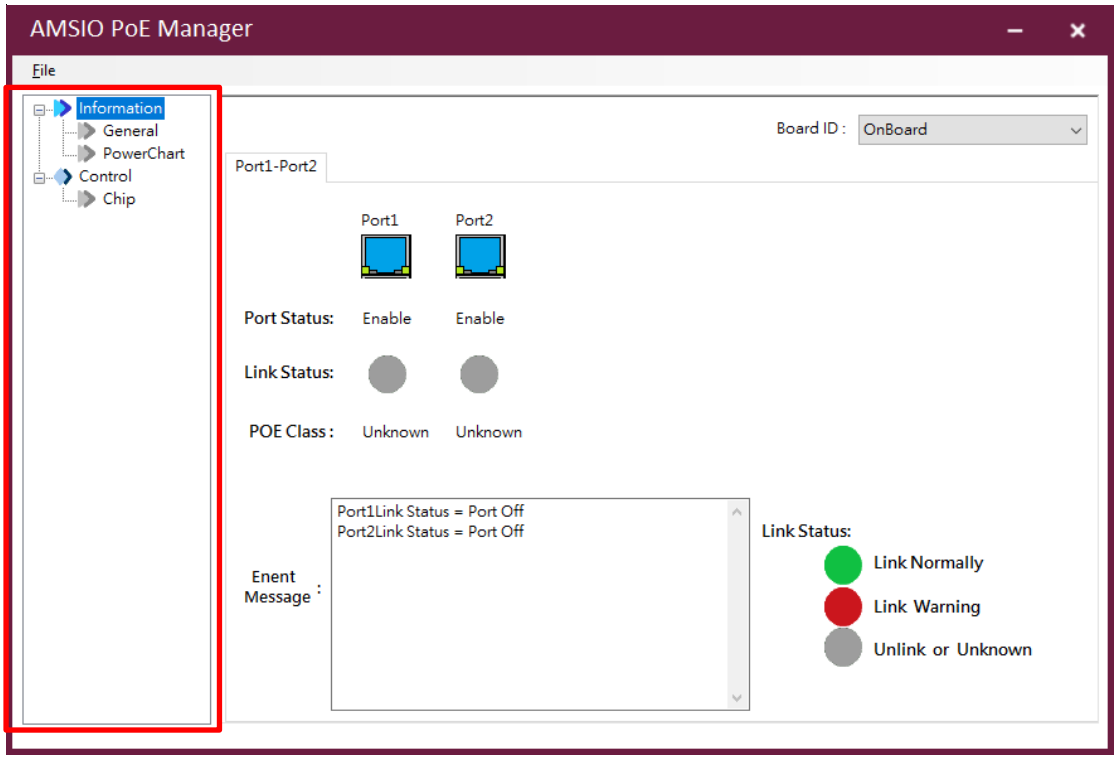

Figure4: PoE Manager menu list

Information

The information menu includes the "General" and "PowerChart" options. "General" is responsible for showing each port's status, and "PowerChart" is responsible for showing the power consumption chart.

Control

The control menu contains the "Chip" option, which provides the functions including each port's control switch, max power budget display and user-defined power budget, and the save configuration button.

2.3 Features

2.3.1 Information

- **General**

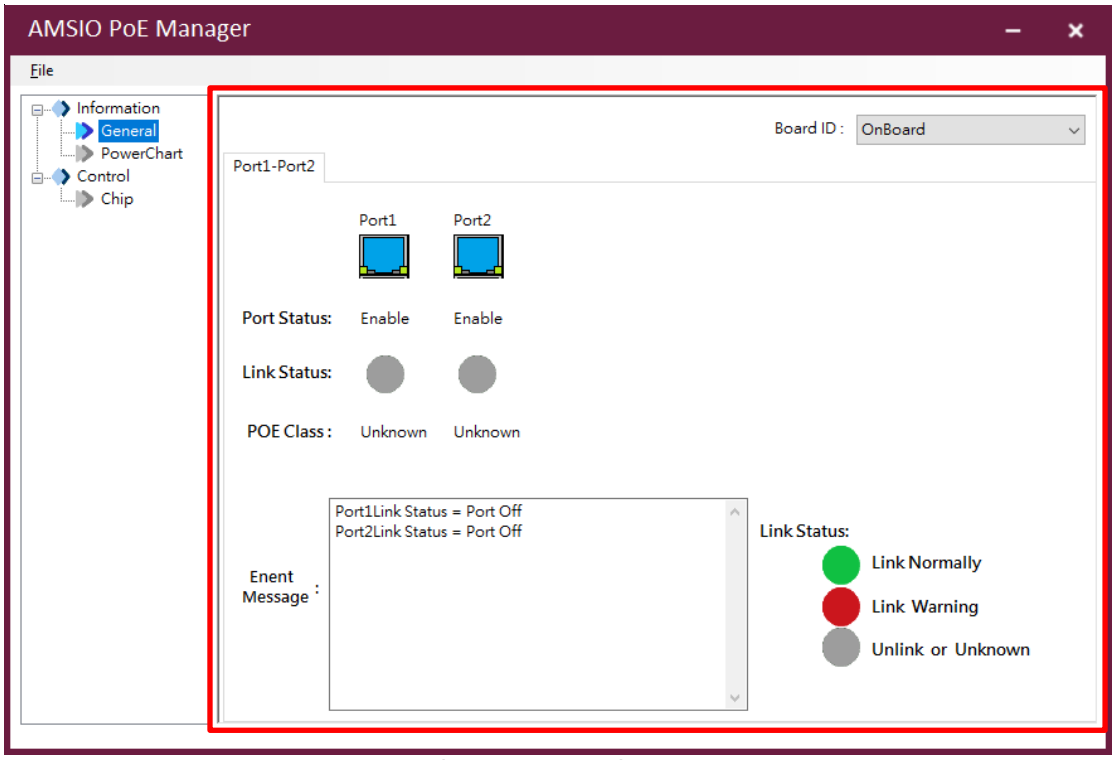

Figure5: General page

Board ID: The board ID displays the board number and the module's name. The user can click the drop-down list to display other module information.

Tab Sort: The tab sort shows all available device ports.

Port Status: The port status displays an enabled port with the word "Enable" and a port icon that lights up ; it displays a disabled port with the word "Disable" and a port icon with dim lights . (The user can control port status using the "Chip" function. Refer to "Chip" in section 2.3.2)

Link Status: The link status can display connection status with a powered device (PD). The green icon indicates a normal connection with PD. The red icon warns of a connection problem with PD, and the user can search the port error code in the "Event Log" txt file to understand what has caused the problem. If the icon turns gray, it shows the system hasn't connected to PD or has connected to an undefined device.

POE Class: The POE class describes PD's classification, which follows the 802.3 af/at

protocol to define.

Event Message: It displays detailed information on a port's link status; if the link status icon turns red to indicate a connection problem, the event message will report more detailed information.

- Power Chart

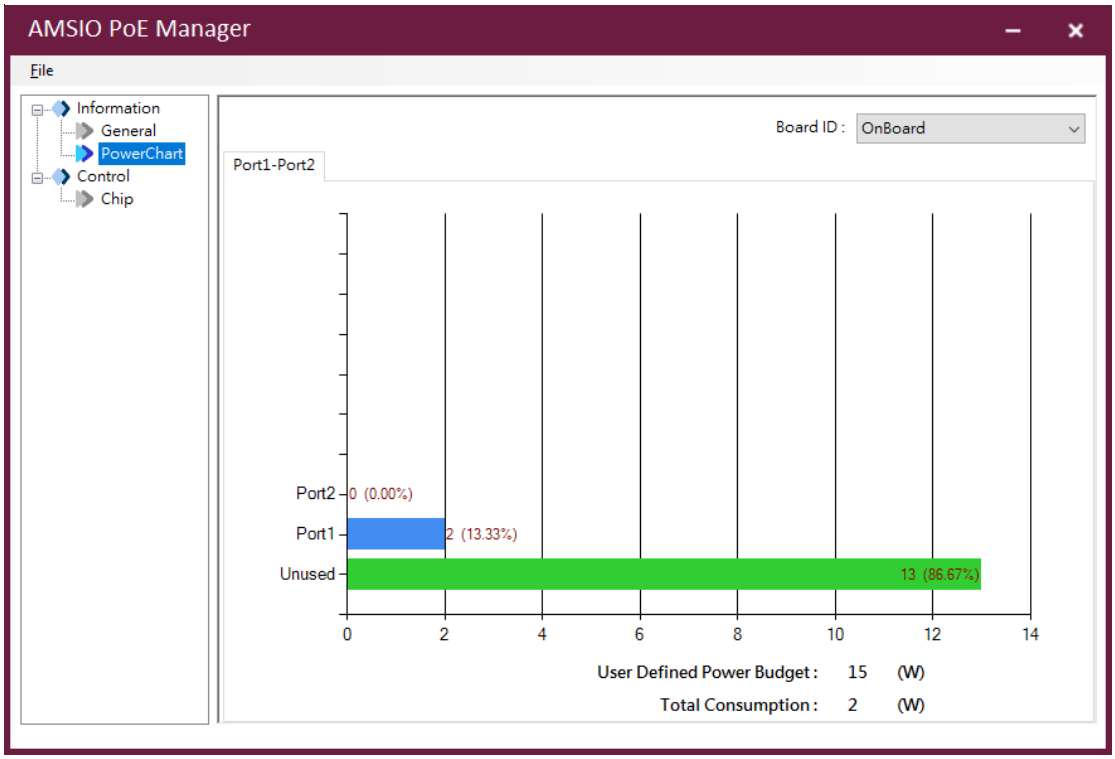

Figure6: PowerChart page

Chart: The chart describes power consumption by each port and total amount of unused power. It uses percentage to represent ratio of each port.

User Defined Power Budget: The power budget shows the upper limit of power for use defined by the user. The user can go to the "Chip" option to set power budget, which cannot exceed the max power budget. Refer to "Chip" in section 2.3.2.

Total Consumption: The function displays total power consumption value of all ports by adding up every port's power in use.

2.3.2 Control

- Chip

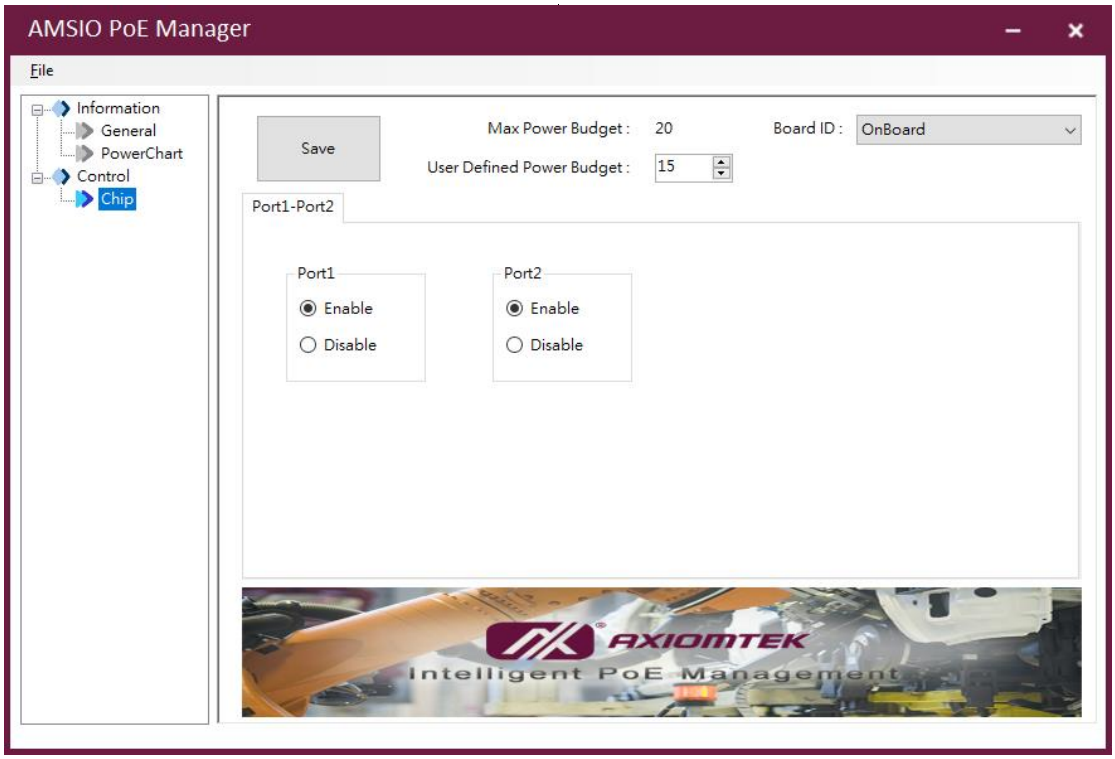

Figure7: Chip page

Max Power Budget: The function shows the module's max power value. The user cannot set power budget higher than max power budget.

User Defined Power Budget: The user can define any power budget value, which cannot exceed max power budget.

Port Switch: The user can turn on port by selecting "Enable", or turn off port by selecting "Disable". Each port's status can be monitored in the "General" menu.

Save Button: Click the "Save" button to save all user set values into the module's chip; all user defined settings will be reserved when the system is shut down or restarted.