

*Silvertel*

**EvalAg6800  
User Manual**

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### 3 Kit Contents

- Ag6800 Evaluation Board
- Ag6800 PSE Module

### 4 Introduction

This manual is intended to be a guide to using the “EVALAg6800 evaluation board”, with the following Silver Telecom IEEE802.3bt PSE module: -

#### Ag6800

The board is designed to handle 10/100/1000/10GBASE-T Ethernet data rates.

#### **4.1 EvalAg6800**

The EVALAG6800 evaluation board is fitted with SilverTel’s Ag6800 IEEE802.3bt PSE module and can be used to power IEEE compliant PD’s through its RJ45 output connector J101.

### 5 Evaluation Board Description for Ag6800

#### **5.1 Input**

The EVALAG6800 evaluation board should be powered using a DC Power supply delivering between +52V to +57V. The positive supply should be connected to either JP1 or pin 1 of J3 and 0V to either JP2 or pin 2 of J3.

If LED1 is illuminated then there is power going to the Ag6800 input.

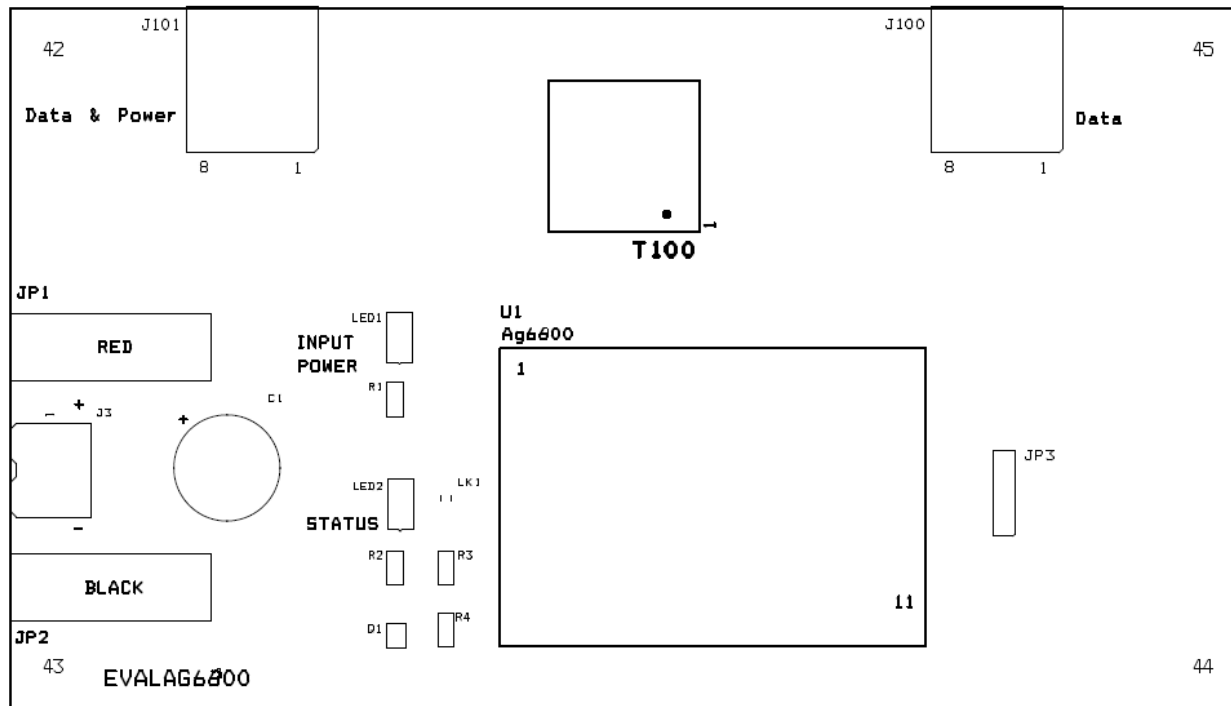


Figure 1: EVALAg6800 Board Layout

Data input into the EVALAg6800 is through the connector J100 which is passed through the data transformer T100 and transferred out via connector J101. The Ag6800 output power is added to the output center taps of the data transformer T100, to output on to J101 with the data (see Figure 1). When the Ag6800 module output is ON, LED2 will be illuminated.

## 5.2 Status Output

The Status output pin is a low drive logic output and is connected to an LED drive circuit connected across the input rail; however this can be isolated by removing the link LK1. This will illuminate once connected and powering an IEEE compliant PD - Please see datasheet section 7 for full information.

## 5.3 Ag6800 Information

Full operating conditions, feature sets including powering legacy systems such as POH can be found in the product datasheet, available from [www.silvertel.com](http://www.silvertel.com).

# 6 Set-up

## 6.1 Power Supply Input

Figure 2 shows the basic set up using the EVALAg6800 evaluation board along with the EVALAg5800 evaluation board with a power supply input to JP1.

The equipment required: -

- Power supply Input +57V IN e.g. Meanwell SP-240-48 available from mouser which will give 57V
- Ethernet Data Cable (CAT5e cable) Input and Output
- CAT5e or CAT6 interlink cable (between EvalAg6800 and EvalAg5800)
- Output power cable

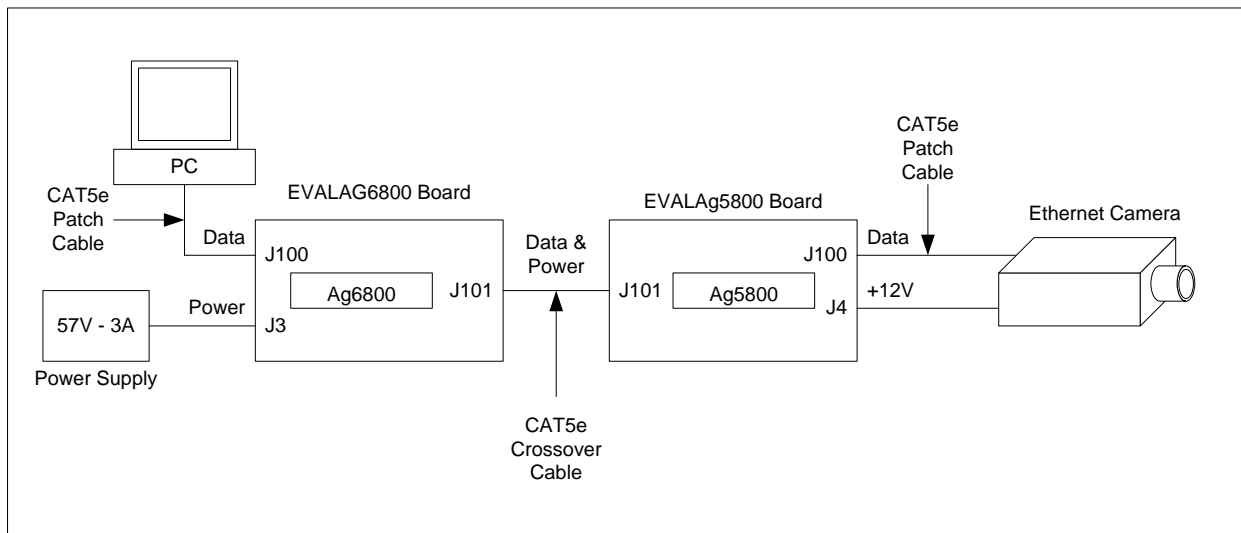


Figure 2: Basic set-up

## 6.2 Data Input

To pass data via the Evaluation boards, the data input (e.g. Internet) can be connected to J100 on the Ag6800 Eval Board using a cat5e cable. The data is then passed through the data transformer, where power is added and sent out via connector J101 of the Ag6800 Eval Board. The Data and power is extracted through J100 of the EVALAg5800 board and then divided into its separate power and data through the data transformer. The data output is then available from J100 of the EvalAg5800 Board, which can then be connected to your device.