



**EVALAG6100 REV2**

**Ag6100 Evaluation Board  
User Manual**

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### 3 Introduction

This manual is intended to be a guide to using the “EVALAG6100 Rev 2 evaluation board” with a Silvertel Ag6100 Power Sourcing Equipment (PSE) module.

### 4 Board Description

The EVALAG6100 evaluation board takes power in on J3, data in on J100 and transmits data & power out on J101 (see Figure 1).

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

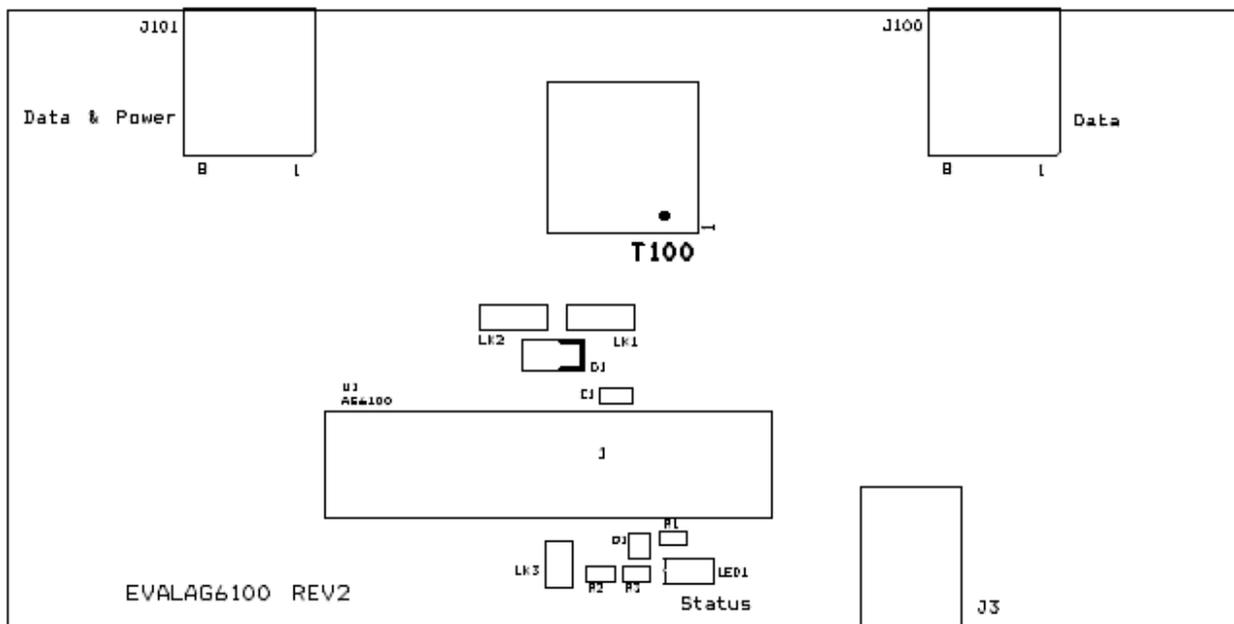


Figure 1: Board Layout

## 4.1 Power In

The Ag6100 evaluation board is powered from a 44V to 57V bench power supply, connected to J3 (centre pin positive).

## 4.2 Data In

Input data is connected to the evaluation board via J100.

## 4.3 Data & Power Out.

The output data & PoE power is transmitted from the evaluation board via J101.

The output PoE power can be connected to the centre taps of the data transformer by setting the links LK1 (positive) and LK2 (negative).

Figure 2 shows the link positions to connect power to the centre taps of the pairs 1&2 and 3&6.

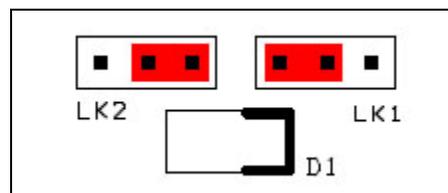


Figure 2: Output Power on 1&2 and 3&6

Figure 3 shows the link positions to connect power to the centre taps of the pairs 4&5 and 7&8.

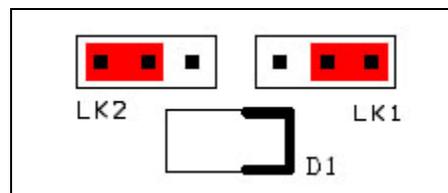


Figure 3: Output Power on 4&5 and 7&8

## 4.4 Status Output

The Status output pin is connected to an LED drive circuit. This can be isolated by removing the link LK3.

## 5 Equipment Required

Figure 4 shows the basic set up using the Ag6100 evaluation board.

The equipment required: -

- 44V to 57V Power Supply
- Powered Device
- CAT5e cables
- Input power cable

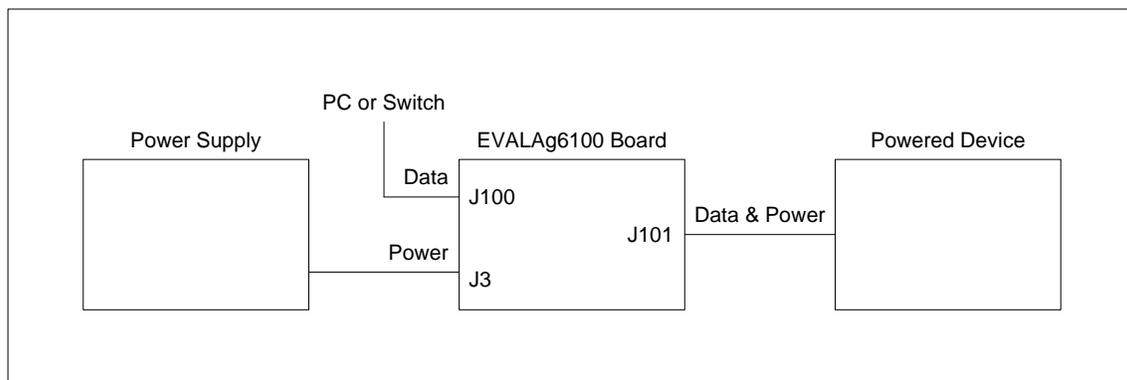


Figure 4: Basic set-up

## 6 Using the Board

### 6.1 Typical Application

Figure 5 shows an example set-up using an EVALAG6100 board and an EVALPOE board (with an Ag9405) supplying +5V to a DLink DCS-900 ethernet camera.

The PC ethernet port is connected to the data input of the EVALAG6100 board (J100) via a short Cat5e patch cable. The Data & Power output from the EVALAG6100 board (J101) is connected to the input of the EVALPOE board via a CAT5e cable. The data output of the POE evaluation board is connected to the data port of the ethernet camera via a short crossover CAT5e cable. The (+5V) power output from the EVALPOE board is connected to the dc input of the ethernet camera.

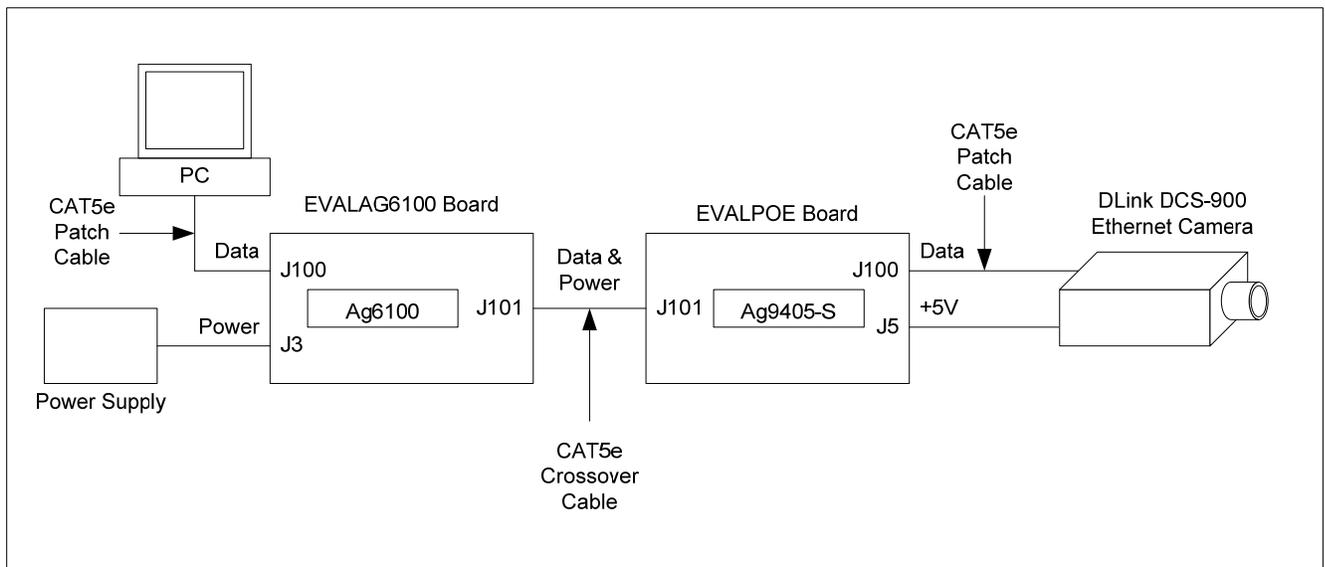


Figure 5: Example set-up