



MIPI-LVDS-DC-UG-v1.1 October 2022 www.elitestek.com

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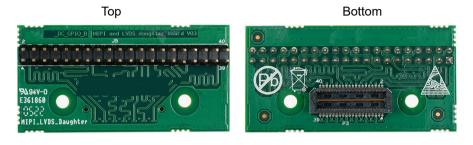
### Introduction

The MIPI and LVDS Expansion Daughter Card (part number: EFX\_DC\_GPIO\_B) converts the signals from the development board's QSE connector.



**Learn more:** Refer to the MIPI and LVDS Expansion Daughter Card Schematics and BOM for the part details and schematics.

Figure 1: MIPI and LVDS Expansion Daughter Card





Warning: The board can be damaged without proper anti-static handling.

#### **Supported Development Boards**

You can use MIPI and LVDS Expansion Daughter Card with:

- 钛金系列 Ti60 F225 Development Board
- 钛金系列 Ti180 M484 Development Board
- Trion T120 BGA576 Development Board
- Trion T120 BGA324 Development Board
- Trion T20 BGA256 Development Board
- Trion T20 MIPI Development Board

#### What's in the Box?

The MIPI and LVDS Expansion Daughter Card includes:

- MIPI and LVDS Expansion Daughter Card
- 2 standoffs
- 2 screws
- 2 nuts

## **Features**

- Bridges 40-pin QSE connector on the development board to a 40-pin header
- Power supplied from the development board; no external power required
  - Each pin supports up to 3 A

### **Headers**

**Table 1: MIPI and LVDS Expansion Daughter Card Headers** 

| Reference<br>Designator | Description  |
|-------------------------|--|
| Р3                      | 40-pin QTE connector bringing MIPI or LVDS signals, power, and GPIO pins from the development board. |
| J5                      | 40-pin header.   |

#### Headers P3 (QTE Connector) and J5 (40-Pin Header)

P3 is a 40-pin QTE connector to connect the daughter card to the QSE connector on the development board. J5 is a 40-pin header.

Table 2: P3 and J5 Pin Assignments

| Pin<br>Number | Pin Name | Description | Pin<br>Number | Pin Name | Description |
|---------------|----------|-------------|---------------|----------|-------------|
| 1             | GPIO_H01 | User I/O    | 2             | GPIO_H02 | User I/O    |
| 3             | GPIO_H03 | User I/O    | 4             | GPIO_H04 | User I/O    |
| 5             | GND      | Ground      | 6             | GND      | Ground      |
| 7             | GPIO_H07 | User I/O    | 8             | GPIO_H08 | User I/O    |
| 9             | GPIO_H09 | User I/O    | 10            | GPIO_H10 | User I/O    |
| 11            | GND      | Ground      | 12            | GND      | Ground      |
| 13            | GPIO_H13 | User I/O    | 14            | GPIO_H14 | User I/O    |
| 15            | GPIO_H15 | User I/O    | 16            | GPIO_H16 | User I/O    |
| 17            | GND      | Ground      | 18            | GND      | Ground      |
| 19            | GPIO_H19 | User I/O    | 20            | GPIO_H20 | User I/O    |
| 21            | GPIO_H21 | User I/O    | 22            | GPIO_H22 | User I/O    |
| 23            | GND      | Ground      | 24            | GND      | Ground      |
| 25            | GPIO_H25 | User I/O    | 26            | GPIO_H26 | User I/O    |
| 27            | GPIO_H27 | User I/O    | 28            | GPIO_H28 | User I/O    |
| 29            | GND      | Ground      | 30            | GND      | Ground      |
| 31            | GPIO_H31 | User I/O    | 32            | GPIO_H32 | User I/O    |
| 33            | GPIO_H33 | User I/O    | 34            | GPIO_H34 | User I/O    |
| 35            | GND      | Ground      | 36            | GND      | Ground      |
| 37            | GPIO_H37 | User I/O    | 38            | GPIO_H38 | User I/O    |
| 39            | GPIO_H39 | User I/O    | 40            | GPIO_H40 | User I/O    |

# **Installing Standoffs**

Before using the board, attach the standoffs with the screws provided in the kit.



**Warning:** You can damage the board if you over tighten the screws. Tighten all screws to a torque between  $4 \pm 0.5$  kgf/cm and  $5 \pm 0.5$  kgf/cm.

## **Revision History**

#### **Table 3: Revision History**

| Date         | Version | Description                  |
|--------------|---------|------------------------------|
| October 2022 | 1.1     | Added part number. (DOC-917) |
| April 2022   | 1.0     | Initial release.             |