

### 3. INPUT/OUTPUT TERMINALS

#### 3.1 TFT LCD module

Recommend connector: Molex 54796

| Pin | Symbol      | I/O | Description                             | Remark |
|-----|-------------|-----|-----------------------------------------|--------|
| 1   | Y_Bottom    | IN  | Y axis position (Bottom)                |        |
| 2   | X_Left      |     | X axis position (Left)                  |        |
| 3   | Y_Top       |     | Y axis position (Top)                   |        |
| 4   | X_Right     |     | X axis position (Right)                 |        |
| 5   | Vbatt       |     | Battery voltage to DC/DC                |        |
| 6   | Vbatt       |     | Battery voltage to DC/DC                |        |
| 7   | GND         |     | Digital Ground                          |        |
| 8   | CLK         |     | Data clock signal                       |        |
| 9   | HSYNC       |     | Horizontal sync signal                  |        |
| 10  | VSYNC       |     | Vertical sync signal                    |        |
| 11  | GND         |     | Digital Ground                          |        |
| 12  | VDD         |     | Power supply                            |        |
| 13  | GND         |     | Digital Ground                          |        |
| 14  | LED_PWM     |     | PWM to control LED brightness           |        |
| 15  | ENABLE      |     | Data enable signal                      |        |
| 16  | LCD_ON      |     | Turns LCD on (active high)              |        |
| 17  | G4          |     | Green Data                              |        |
| 18  | G3          |     | Green Data                              |        |
| 19  | B5          |     | Blue Data                               |        |
| 20  | B4          |     | Blue Data                               |        |
| 21  | R5          |     | Red Data                                |        |
| 22  | R4          |     | Red Data                                |        |
| 23  | GND         |     | Digital Ground                          |        |
| 24  | R3          |     | Red Data                                |        |
| 25  | R2          |     | Red Data                                |        |
| 26  | R1          |     | Red Data                                |        |
| 27  | R0          |     | Red Data                                |        |
| 28  | G5          |     | Green Data                              |        |
| 29  | G2          |     | Green Data                              |        |
| 30  | BRIGHT CTRL |     | Grounded – lower LED driver current     |        |
|     |             |     | Pulled High – higher LED driver current |        |
| 31  | G1          |     | Green Data                              |        |