# INP3000 Programmer Board

## VERSION 3.0

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JTAG/SWD connector

Micro B USB connector for power /Programming

SPI/UART Selection SWITCH

SPI/UART programming Cable with 8 wires, includes RTS and CTS

2 PIN UART Cable with 6 Wires

UART Programming Switch selection Table SW1

Figure 3: INP3000 programmer kit contents - version 3.0

Table 2 provides the description of each Connector on the board:

|  |  |
| --- | --- |
| **Connector** | **Description** |
| J14 | 4 PIN UART PROGRAMMING CABLE which includes RTS and CTS |
| J12 | 2 PIN UART PROGRAMMING CABLE |
| J13 | SPI Programming header |
| J3 | GPIO headers |
| J6 | JTAG header |
| SW1 | UART/SPI programming interface selector |
| J8 | EXTRA FTDI PIN headers |
| X1 | USB Micro B Connector |

Table 2: INP3000 ver 3.0 Connectors with description

Connector J12 (2 PIN UART HEADER) Pin-out table:

|  |  |
| --- | --- |
| **J12** | **Description** |
| 1 | GND |
| 2 | EN\_CHIP/\_RST |
| 3 | GPIO1/TXD |
| 4 | GPIO2/RXD |
| 5 | GPIO17\_CONSOLE\_RX |
| 6 | GND |

Table 3: 2PIN UART HEADER

Connector J13 (SPI HEADER) Pin-out table:

|  |  |
| --- | --- |
| **J13** | **Description** |
| 1 | GND |
| 2 | EN\_CHIP/\_RST |
| 3 | GPIO0\_SPI\_CLK |
| 4 | GPIO1\_SPI\_MOSI |
| 5 | GPIO2\_SPI\_MISO |
| 6 | GPIO5\_SPI\_CS |
| 7 | GPIO17\_CONSOLE\_RX |
| 8 | GND |

Table 4: SPI HEADER

Connector J14 (4 PIN UART HEADER) Pin Out table:

|  |  |
| --- | --- |
| **J13** | **Description** |
| 1 | GND |
| 2 | EN\_CHIP/\_RST |
| 3 | GPIO1/TXD |
| 4 | GPIO2/RXD |
| 5 | GPIO4\_UART\_CTS |
| 6 | GPIO5\_UART\_RTS |
| 7 | GPIO17\_CONSOLE\_RX |
| 8 | GND |

Table 5: 4PIN UART HEADER

SW1 Switch settings for SPI and UART:

|  |  |  |
| --- | --- | --- |
| **SW1** | **UART** | **SPI** |
| Position 1 | ON | OFF |
| Position 2 | OFF | ON |
| Position 3 | ON | OFF |
| Position 4 | OFF | ON |
| Position 5 | ON | OFF |
| Position 6 | OFF | ON |

Table 6: SW1 switch settings for SPI & UART

Diagram, schematic

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Figure 4: Switch settings to select between SPI and UART

J6 JTAG Connector Pin-out:

|  |  |  |  |
| --- | --- | --- | --- |
| **Description** | **PIN** | **PIN** | **Connection** |
| No Connect | 1 | 2 | GPIO19\_JTAG\_TMS |
| GND | 3 | 4 | GPIO18\_JTAG\_TCK |
| GND | 5 | 6 | GPIO21\_JTAG\_TDO |
| No Connect | 7 | 8 | GPIO20\_JTAG\_TDI |
| GND | 9 | 10 | EN\_CHIP/\_RST |

Table 7: JTAG HEADER

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Figure 5: Connectors for application board

Use the mating connector on the Molex cable connected to FTDI board version 3.0 in Figure 5 to independently program the Talaria TWO module.