



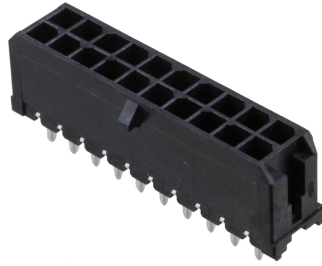
Universal Payload Connector

Spec Sheet

This datasheet describes the payload connections on the bottom of all Inspired Flight vehicles (IF750, IF1000, and IF1200).

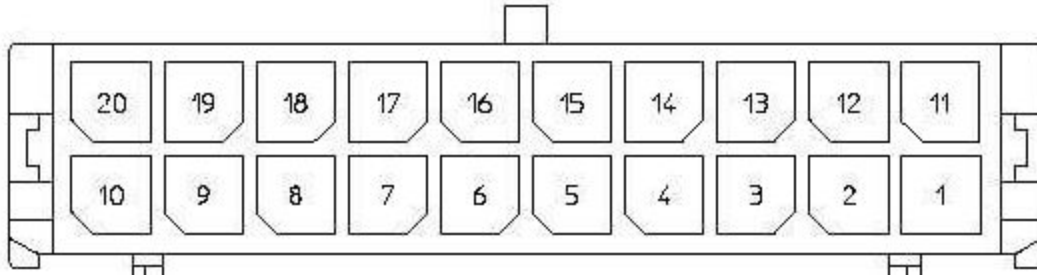
Each vehicle is outfitted with a 6" long cable, just above the bottom payload plate, that has a Molex Micro-Fit connector. The connector has 20 pins that can be used for wiring any payload. The pinout and descriptions of each pin are listed below.





Connector Type:

Connector Manufacturer	Molex
Manufacturer Part Number	430452029
Series	Micro-Fit
Connector Type	Header
Contact Type	Male Pin
Number of Positions	20
Number of Rows	2



Connector Pinout:

Pin	Pin Name	Description	Notes
1	UPI_USB_5V	Connects to Flight Core usb header	Can be connected to a VOXL expansion board instead of Flight Core such as the VOXL Microhard board.
2	UPI_USB_DM		
3	UPI_USB_DP		
4	UPI_USB_GND		
5	UPI_PWM1	LED0 on PCA9685	5V PWM operation. The PCA9685 is connected to SDA2 and SCL2 on the Flight Core
6	UPI_PWM2	LED1 on PCA9685	
7	UPI_PWM3	LED3 on PCA9685	
8	UPI_PWM4	LED4 on PCA9685	
9	UPI_UART1_TXD	VOXL UART	BLSP9_UART_TX_3P3
10	UPI_UART1_RXD	VOXL UART	BLSP9_UART_RX_3P3
11	UPI_UART2_TXD	Flight Core UART	UART4_2W_TX_3V3
12	UPI_UART2_RXD	Flight Core UART	UART4_2W_RX_3V3
13	UPI_GPIO_AUX1	VOXL GPIO	VOXL GPIO 25
14	UPI_GPIO_AUX2	VOXL GPIO	VOXL GPIO 26
15	5V	5V Regulator on PDB	
16	GND	PDB GND	
17	12V or 15V	12V or 15V from PDB	Connect B1 solder bridge on PDB for 15V operation
18	GND	PDB GND	
19	BAT	6S or 12S	Wait for 6S or 12S to be within 70% of battery voltage before starting load
20	GND	PDB GND	