Main Controller Board

			GND	HEADER	VDD		
Power System	BAT12_VOLTS	2.0			GND		
	BAT12_AMPS	2.1			1.7 <Reserved Indication>		
	BAT24_VOLTS	2.2		LED	1.6 LED		
	BAT24_AMPS	2.3			1.5 <Reserved Indication>		
LifeRay	LIFERAY_ENABLE	2.4			1.4 <Reserved Indication>		
Video Mux	VIDMUX_A	2.5			1.3 SERVO_4_TILT	Gimbal	
	VIDMUX_B	2.6			1.2 SERVO_3_PAN		
	VIDMUX_C	2.7			1.1 SERVO_2_RIGHT	Drive ESCs	
IMU	SCL	3.0			1.0 SERVO_1_LEFT		
	SDA	3.1			0.7 SW (BUTTON)		
	DEBUG	3.2		IC	0.6 SCLK		
	DEBUG	3.3			0.5 MISO		
	<Reserved Input>	3.4			0.4 MOSI		
	<Reserved Input>	3.5			0.3 WIZ_SS	WizNet	
	<Reserved Input>	3.6			0.2 WIZ_RST		
	<Reserved Input>	3.7			0.1 WIZ_RDY		
	DEBUG	3.2			0.0 WIZ_INT		
	DEBUG	3.3			4.3 <Reserved>		
	DEBUG	RESET			4.2 GPS_ENABLE		
	DEBUG	GND			4.1 TX-OUT	GPS	
	DEBUG	VDD		BUTTON	4.0 RX-IN		

v1.1

Legend

Not Assigned
System/No Use
Analog
PWM Outputs
I2C
SPI
Serial
Digital Outputs
Buttons/Switchs

Arm Controller Board

			GND	HEADER	VDD		
Arm Joints	POT_SHOULDER	2.0			GND		
	POT_ELBOW	2.1			1.7 <Reserved Indication>		
Soil Taster	SENS_HYGRO	2.2		LED	1.6 LED		
	SENS_PH	2.3			1.5 <Reserved Indication>		
	MOTOR_AUGER_A	2.4			1.4 <Reserved Indication>		
	MOTOR_AUGER_B	2.5			1.3 SERVO_4_GRIPPER	Gripper Servo	
	<Reserved Output>	2.6			1.2 SERVO_3_ELBOW	Arm ESCs	
	<Reserved Output>	2.7			1.1 SERVO_2_SHOULDER		
	<I2C Reserved>	3.0			1.0 SERVO_1_TURRET	Monster Red Servo	
	<I2C Reserved>	3.1			0.7 SW (BUTTON)		
	DEBUG	3.2		IC	0.6 SCLK		
	DEBUG	3.3			0.5 MISO		
Arm Hardstop switches	STOP_SHDR_UP	3.4			0.4 MOSI		
	STOP_SHDR_DN	3.5			0.3 WIZ_SS	WizNet	
	STOP_ELB_UP	3.6			0.2 WIZ_RST		
	STOP_ELB_DN	3.7			0.1 WIZ_RDY		
	DEBUG	3.2			0.0 WIZ_INT		
	DEBUG	3.3			4.3 <Reserved>		
	DEBUG	RESET			4.2 BIDIR_SEL		
	DEBUG	GND			4.1 TX-OUT	Dynamixel Servos	
	DEBUG	VDD		BUTTON	4.0 RX-IN		

Details

GPS_ENABLE	Required to squelch GPS when system is programming via Serial
MOTOR_AUGER_x	Stimulates H-Bridge motor driver to control drill/auger system (Can be ESC(s) instead)