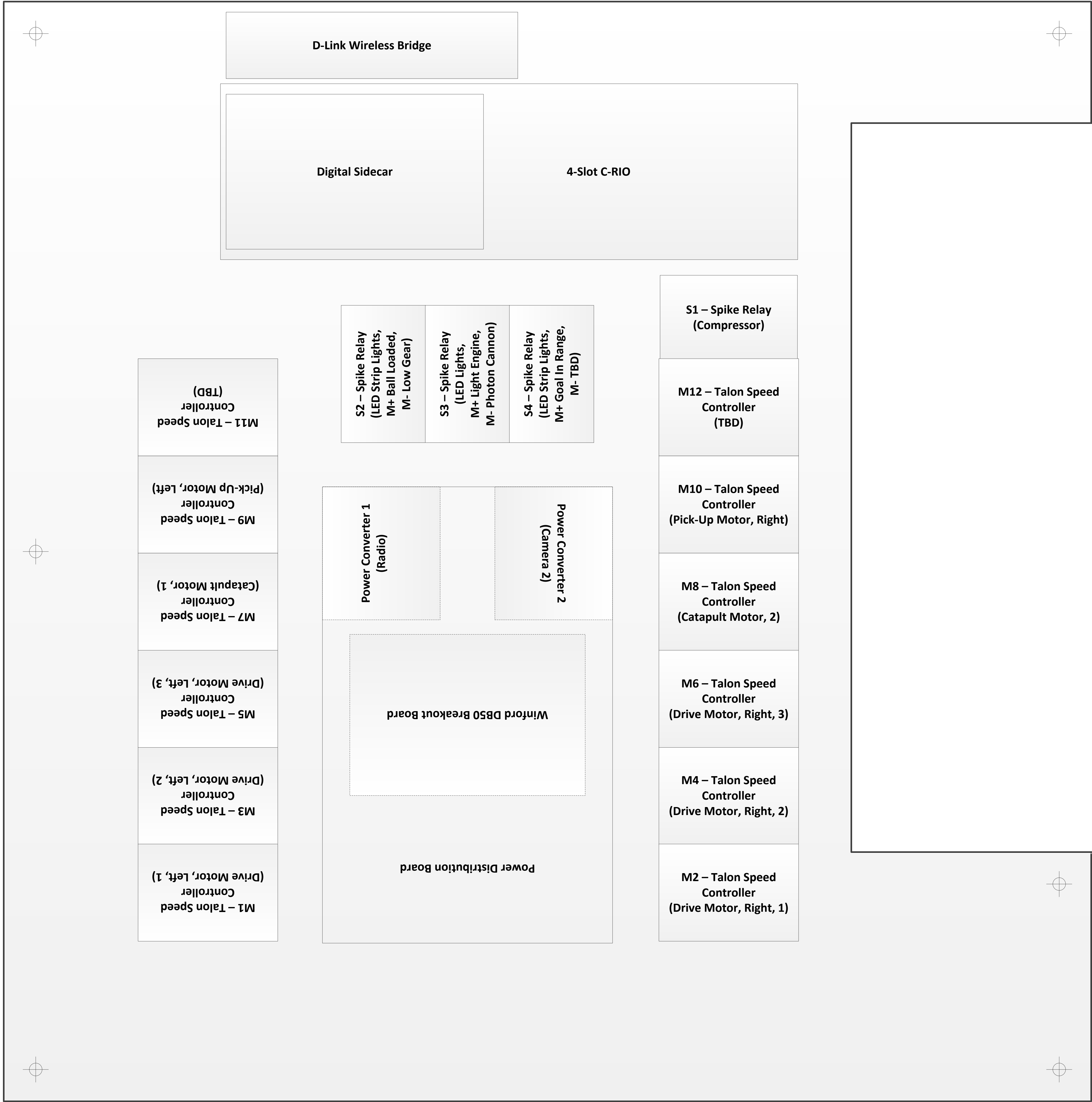


TEAM 1701

ROBOCUBS

U OF D JESUIT

2014 ELECTRONICS BOARD LAYOUT



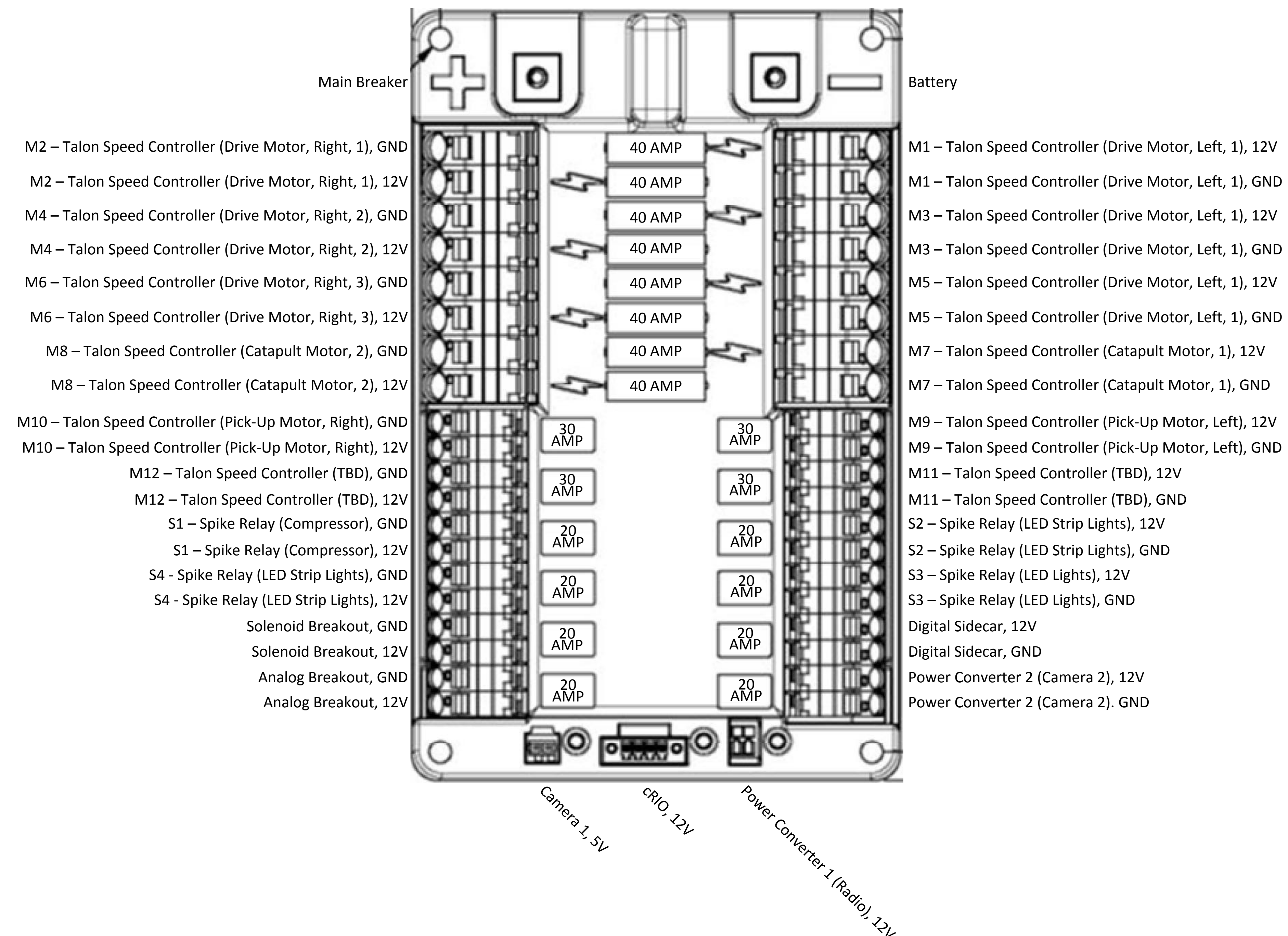


TEAM 1701

ROBOCUBS

U OF D JESUIT

2014 POWER DISTRIBUTION BOARD LAYOUT



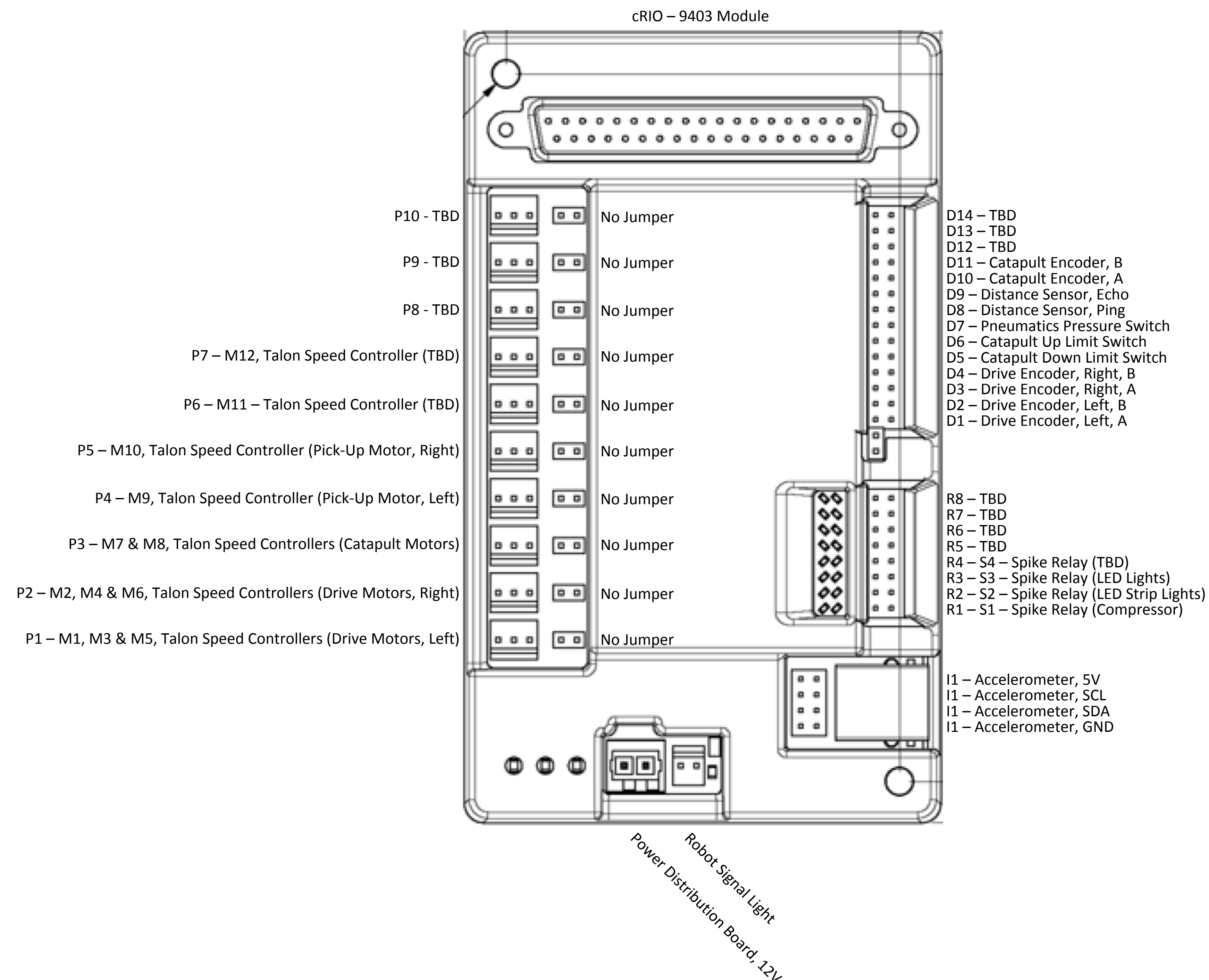


TEAM 1701

ROBOCUBS

U OF D JESUIT

2014 DIGITAL SIDECAR LAYOUT



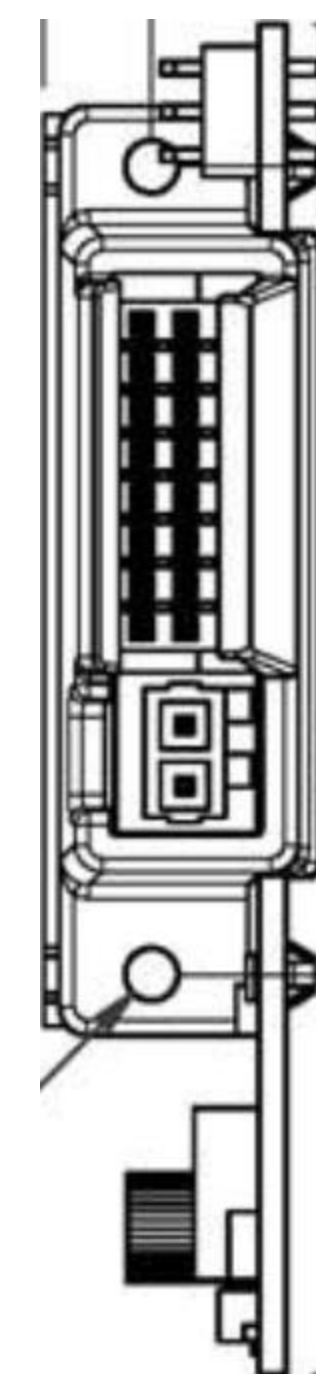


TEAM 1701

ROBOCUBS

U OF D JESUIT

2014 ANALOG BREAKOUT LAYOUT



Jumper Installed

A8 – Used for Voltage Readout
A7 – TBD
A6 – TBD
A5 – Distance Sensor, Ball Loaded
A4 – Distance Sensor, Range
A3 – Distance Sensor, Low Goal
A2 – TBD
A1 – Gyroscope, Rate

Power Distribution Board, 12V

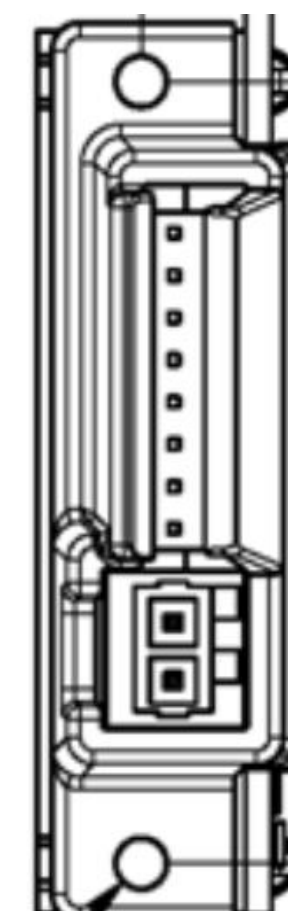


TEAM 1701

ROBOCUBS

U OF D JESUIT

2014 SOLENOID BREAKOUT LAYOUT



D08 – TBD
D07 – TBD
D06 – TBD
D05 – TBD
D04 – Pick-Up Articulate, In
D03 – Pick-Up Articulate, Out
D02 – Drive Shift, Down
D01 – Drive Shift, Up

Power Distribution Board, 12V



TEAM 1701

ROBOCUBS

U OF D JESUIT

2014 DB50 PIN LAYOUT

Pin	Device	Polarity	Dest.	Pin	Device	Polarity	Dest.	Pin	Device	Polarity	Dest.
1	Drive Encoder, Left	GND	DIO 1	18	Gyro Rate	GND	Analog 1	35	Solenoid, Drive Shift, Up	GND	DO1
2	Drive Encoder, Left	PWR 5V	DIO 1	19	Gyro Rate	PWR 5V	Analog 1	36	Solenoid, Drive Shift, Up	+OUT	DO1
3	Drive Encoder, Left	SIG A	DIO 1	20	Gyro Rate	SIG	Analog 1	37	Solenoid, Drive Shift, Down	GND	DO2
4	Drive Encoder, Left	SIG B	DIO 2	21	Catapult Encoder	GND	DIO 10	38	Solenoid, Drive Shift, Down	+OUT	DO2
5	Drive Encoder, Right	GND	DIO 3	22	Catapult Encoder	PWR 5V	DIO 10	39	Solenoid, Pick-Up Articulate, Out	GND	DO3
6	Drive Encoder, Right	PWR 5V	DIO 3	23	Catapult Encoder	SIG A	DIO 10	40	Solenoid, Pick-Up Articulate, Out	+OUT	DO3
7	Drive Encoder, Right	SIG A	DIO 3	24	Accelerometer	GND	I2C	41	Solenoid, Pick-Up Articulate, In	GND	DO4
8	Drive Encoder, Right	SIG B	DIO 4	25	Accelerometer	PWR 5V	I2C	42	Solenoid, Pick-Up Articulate, In	+OUT	DO4
9	Catapult Down Limit Switch	GND	DIO 5	26	Accelerometer	SDA	I2C	43	TBD		
10	Do Not Use	n/a	n/a	27	Accelerometer	SCL	I2C	44	TBD		
11	Catapult Up Limit Switch	GND	DIO 6	28	TBD			45	TBD		
12	Catapult Up Limit Switch	SIG	DIO 6	29	TBD			46	TBD		
13	Pneumatics Pressure Switch	GND	DIO 7	30	TBD			47	TBD		
14	Pneumatics Pressure Switch	SIG	DIO 7	31	TBD			48	TBD		
15	TBD			32	TBD			49	Catapult Encoder	SIG B	DIO 11
16	TBD			33	TBD			50	Catapult Down Limit Switch	SIG	DIO 5
17	TBD			34	TBD						



TEAM 1701

ROBOCUBS

U OF D JESUIT

2014 MOTOR USAGE

Motor	Purpose	Controller	PWM
CIM FR801-001	Drive Motor, Left, 1	M1 - Talon	1
CIM FR801-001	Drive Motor, Left, 2	M3 - Talon	1
CIM FR801-001	Drive Motor, Left, 3	M5 - Talon	1
CIM FR801-001	Drive Motor, Right, 1	M2 - Talon	2
CIM FR801-001	Drive Motor, Right, 2	M4 - Talon	2
CIM FR801-001	Drive Motor, Right, 3	M6 - Talon	2
Mini CIM 217-3371	Catapult Motor, 1	M7 - Talon	3
Mini CIM 217-3371	Catapult Motor, 2	M8 - Talon	3
AndyMark RS775-5 AM-2161	Pick-Up Motor, Left	M9 - Talon	4
AndyMark RS775-5 AM-2161	Pick-Up Motor, Right	M10 - Talon	5