

POD

“Brain” PIC

- 5 Analog In - Left/Right Wheel Control
Roamer Select
Camera Position Control
Analog Gripper Control
- 1 Digital Out - Active Comm Indicator LED
- 5 Digital In - Start Comm Button
Digital Gripper Control
Three SPECIAL Light Switches
- 1 PWM Out - Battery Life Indicator
- 4 SPI - (Master)
Slave Select
Clock
MOSI
MISO

Radio PIC

- 2 UART
- 4 SPI (Slave)

SPI

UART

XBee Module

Zigbee Wireless

ROAMER

“Brain” E128

- 1 Analog In - Roamer Select
- 4 Digital Out - Data Request Line
Left/Right Wheel Direction
Gripper Direction
- 4 PWM Out - Left/Right Wheel Drive
Gripper Motor Control
Special Servo Control
- 2 UART
- 4 SPI - (Slave)
Slave Select
Clock
MOSI
MISO

XBee Module

UART

Data Request Line

SPI

SPECIAL PIC

- 1 Digital In - Data Request
- 5 SPI - (Master)
Two Slave Selects
Clock
MOSI
MISO

SPECIAL

- SPI Slave

SPI