

dsPIC33FJ128MC706A pins OctoRoACH						
June 29, 2011						
<b>Pin number</b>	<b>dsPIC Functions</b>	<b>ImageProc Function</b>		<b>Pin number</b>	<b>dsPIC Functions</b>	<b>ImageProc Function</b>
<b>CAMERA</b>				<b>RADIO</b>		
44	IC3/INT3/RD10	ADXL345 interrupt		45	IC4/INT4/RD11	radio IRQ
46	OC1/RD0	camera D0		30	AN15/OCFB/CN12/RB15	Radio SLP_TR
49	OC2/RD1	camera D1		14	AN2/SS1*/CN4/RB2	SPI1 radio
50	OC3/RD2	camera D2		33	U1TX/SDO1/RF3	SPI1 radio
51	OC4/RD3	camera D3		34	U1RC/SDI1/RF2	SPI1 radio
52	OC5/IC5/CN13/RD4	camera D4		35	U1TS*/SCK1/INT0/RF6	SPI1 radio
53	OC6/IC6/CN14/RD5	camera D5		<b>FLASH</b>		
54	OC7/CN15/RD6	camera D6		4	SCK2/CN8/RG6	SPI2 FLASH
55	OC8/UPDN/CN16/RD7	camera D7		5	SDI2/CN9/RG7	SPI2 FLASH
58	C1RX/RF0	camera HREF		6	SDO2/CN10/RG8	SPI2 FLASH
59	C1TX/RF1	camera PCLK		8	SS2*/CN11/RG9	SPI2 FLASH
48	PGEC2/SOSCO/T1CK/CN0/RC14	camera PWDN		<b>ICD</b>		
47	PGED2/SOSCI/T4CK/CN1/RC13	camera Vsync		17	PGEC1/AN6/OCFA/RB6	JP3-1 (ICD)
39	OSC1/CLKIN/RC12	camera xclk		18	PGED1/AN7/RB7	JP3-2 (ICD)
36	SDA1/RG3	I2C1 camera, ADXL345		20	Avss	JP3-3 (ICD)
37	SCL1/RG2	I2C1 camera, ADXL345		19	Avdd	JP3-4 (ICD)
<b>Gyro</b>				7	MCLR*	JP3-5 (ICD)
42	IC1/FLTA*/INT1/RD8	gyro INT		<b>LEDs</b>		
31	U2RX/SDA2/CN17/RF4	I2C gyro		27	TCK/AN1/RB12	LED1
32	U2TX/SCL2/CN18/RF5	I2C gyro		28	TDI/AN13/RB13	LED2
<b>Low Volt</b>				29	U2RTS*/AN14/RB14	LED3
43	IC2/U1CTS*/FLT B*/INT2/RD9	low volt detect		<b>Motor Drive</b>		
				15	PGEC3/AN1/Vref-/CN3/RB1	JP10-2 (L motor EMF)
				62	PWM2L/RE2	JP5-2 (H bridge IN1/L motor drive)
				60	PWM1L/RE0	JP5-4 (R motor drive)
				24	TDO/AN11/RB11	JP5-5 (R motor EMF)
	<b>AVAILABLE IO</b>					
1	PWM3H/RE5	JP10-1				
13	AN3/INDX/CN5/RB3	JP10-3				
12	AN4/QEA/IC7/CN6/RB4	JP10-4 Left Hall Effect				
11	AN5/QEB/IC8/CN7/RB5	JP10-5 Right Hall Effect				
3	PWM4H/RE7	JP10-6				
2	PWM4L/RE6	JP10-7				
63	PWM2H/RE3	JP10-8				
61	PWM1H/RE1	JP10-9				
21	U2CTS*/AN8/RB8	JP3-6				
64	PWM3L/RE4	JP5-1 (H bridge IN2)				
16	PGED3/AN0/Vref+/CN2/RB0	JP8-1				
23	TMS/AN10/RB10	JP9-1				
40	OSC2/CLKO/RC15	JP9-2				
22	AN9/RB9	<b>no connection</b>				