Eric Mittleman - RGB Sensor Power Budget

	Component Name	Part Number	Supply Voltage Range	Otv	Absolute Maximum Current (mA)	Total Current	Unit
All Major Components			+1.8 - 5.5V	Qty 1	350		
	RGB Sensor	OPT4060DTSR	-0.5 - 6.0V	-	. 350		mA
	RGB Sellsol	UP14060D15K	-0.5 - 6.07	-	10	10	IIIA
3. Assign each major com	ponent to ONE power rail	below.					<u> </u>
+3.3V Power Rail	Component Name	Part Number	Supply Volt Range	Qty	Absolute Maximum Current (mA)	Total Current	Unit
	PIC18F Microcontroller	PIC18F27Q84	+1.8 - 5.5V	1	350	350	mA
	RGB Sensor	OPT4060DTSR	-0.5 - 6.0V	1	10	10	mA
					0	000	4
					Subtotal Safety Margin	360 25%	mA
	Safety Margin Total Current Required on +3.3V Rail					450	mΛ
				1	tat Guirent Required on +3.57 Rait	450	шА
C. Regulator	+3.3V Regulator	L6981C33DR	+3.5 - 38V	1	1500	1500	mA
	 	1	l		otal Remaining Current on +3.3V Rail	1050	Л
						1030	IIIIA
		T				1030	MA
	ve, select a specific volta	ge regulator using the	e same process as for major		tion. Confirm the Total Remaining Cur		
C. For each power rail abo	ove, select a specific volta	ge regulator using the	e same process as for major				
C. For each power rail abo				component selec	tion. Confirm the Total Remaining Cur	rent Available on	each r
C. For each power rail abo not negative. D. Select a specific extern	nal power source (wall sup	ply or battery) for you	ır system, and confirm that i	component select	tion. Confirm the Total Remaining Cur	rent Available on	each r
C. For each power rail about negative. D. Select a specific extern multiple power sources, li	nal power source (wall sup ist eac separately below ar	ply or battery) for you	ır system, and confirm that i	component select	tion. Confirm the Total Remaining Cur	rent Available on	each r
C. For each power rail about negative. D. Select a specific extern multiple power sources, lisource below is not negative.	nal power source (wall sup ist eac separately below ar ive.	ply or battery) for you nd indicate which reg	ır system, and confirm that i	component selections of the component selection to the component selection	tion. Confirm the Total Remaining Cur the regulators for all of the power rails nfirm that the Total Remaining Current	rent Available on s simultaneously. Available on eac	each r
C. For each power rail about negative. D. Select a specific extern multiple power sources, listource below is not negation in the source of t	nal power source (wall sup ist eac separately below ar ive. Component Name	ply or battery) for you nd indicate which reg Part Number	ur system, and confirm that i gulators will be connected to Supply Voltage Range	t can supply all of each supply. Cor	tion. Confirm the Total Remaining Cur the regulators for all of the power rails firm that the Total Remaining Current Absolute Maximum Current (MmA)	rent Available on simultaneously. Available on eac	each r
C. For each power rail about negative. D. Select a specific extern multiple power sources, lissource below is not negation to the source of t	nal power source (wall sup ist eac separately below ar ive. Component Name	ply or battery) for you nd indicate which reg	ır system, and confirm that i	component selections of the component selection to the component selection	tion. Confirm the Total Remaining Cur the regulators for all of the power rails nfirm that the Total Remaining Current	rent Available on simultaneously. Available on eac	each r
C. For each power rail abo not negative. D. Select a specific extern	nal power source (wall sup ist eac separately below ar ive. Component Name Plug-in Wall Supply	ply or battery) for you nd indicate which reg Part Number	ur system, and confirm that i gulators will be connected to Supply Voltage Range	t can supply all of each supply. Cor	tion. Confirm the Total Remaining Cur the regulators for all of the power rails firm that the Total Remaining Current Absolute Maximum Current (MmA)	rent Available on simultaneously. Available on eac Total Current 3000	If you h power Unit mA

Total Remaining Current Available on External Power Source 1

1500 mA