	Power	Budget Exa	mple				
			iiipic				
Team Number:	Micro Greenhouse	<u>!</u>					
Project Name:							
Team Member Names:	Damien D, Rishik A, Kyle C, Enrique C						
/ersion:	2	!					
			1				
	ve devices, integrated circuits, etc.) exce			rs, resistors			Unit
All Major Components	Component Name	Part Number	Supply	#	Absolute	Total	
		F17FA-03MC	3.3V	1	70		mA .
	MOTOR CONTROLLER	IFX9201SGAUMA1	5V ~ 36V	1	13		mA
	HUMIDY SENSOR	HIH7130-000-001	2.3V ~ 5.5V	1	3.3		mA
		TMP1075DGKR	1.7V ~ 5.5V	1	0.04	0.04	
		ESP32-DEVKITM-1	3.3V	1	240	240	mA
	bove to ONE power rail below. Try to mi						
+3.3V Power Rail	Component Name	Part Number	Supply	#	Absolute	Total	Unit
		F17FA-03MC	3.3V	1	70		mA
	MOTOR CONTROLLER	IFX9201SGAUMA1	5V ~ 36V	1	13		mA
	HUMIDY SENSOR	HIH7130-000-001	2.3V ~ 5.5V	1	3.3		mA
	TEMPERATURE SENSOR	TMP1075DGKR	1.7V ~ 5.5V	1	0.04	0.04	
	ESP32	ESP32-DEVKITM-1	3.3V	1	240	240	mA
					Subtotal	326.34	mA
					Safety Margin	25%	
			Total Cui	rrent Requi	red on +3.3V Rail	407.925	mA
4. Regulator or Source Choice	VOLTAGE REGULATOR 3.3V	AZ34063UMTR-G1	3V ~ 36V	1	1500	1500	mA
			al Remainina Cu	ırrent Avail	able on 3.3V Rail	1092.075	
D. Select a specific external powers	source (wall supply or battery) for your s						
xternal Power Source 1	Component Name	Part Number	Supply	Output	Absolute	Total	Unit
Power Source 1 Selection	2 CELL BATTERY PACK AA	AA-NIMH-DURACELL	2.4V	2.4V	2400	2400	
one: source 2 selection	2 CEEE BY TENT TYCKYOU	701 HINNIT BOIDICEEL	2	2	2100	2-100	
	VOLTAGE REGULATOR 3.3V	AZ34063UMTR-G1	3V ~ 36V	1	1500	1500	mΔ
Power Rails Connected to External	VOLINGE REGULATOR 3.5V	ALS400SOWITK GI	30 300		1500	1300	TILL.
Power Source 1							
		Total Remaining Cu	rront Available	on Evtorno	d Bower Cource 1	000	mA
		iotai kemaining Cu	irrent Avanable	on Externa	ii Power Source 1	900	IIIA
Calculate Battom Life (if you!! - th	ble). For each hatten, also short the we	nuch anna lifationa -fab-	hattam bu 's d'	antina ti-	ann maithe in ma A f		
	ble). For each battery, also check the wo			cating the o		Descriped	
	Component Name	Part Number	Supply		Capacity	Required	
	2 CELL BATTERY PACK AA	AA-NIMH-DURACELL	2.4V		2400	407.925	
					Battery Life	5.883434455	hours
Votes							
xternal Supply Voltage should be d	letermined by the dropout voltage for high	ghest-voltage regulator i	/ α ±1/1// for a	±12\/ regul	lator)		
	esign (e.g., a base unit and remote unit) the						