

Power Management Unit

OVERVIEW

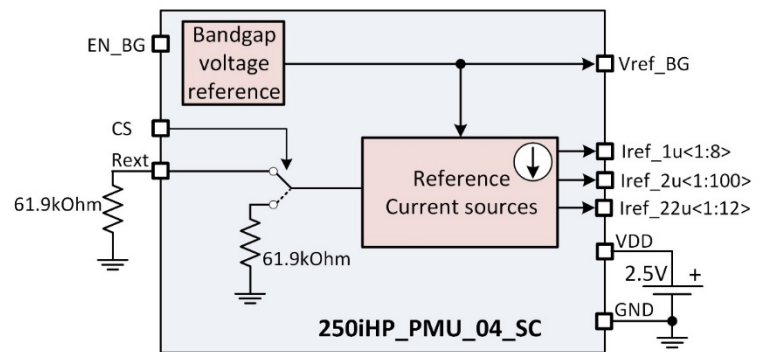
PMU IP includes following components: Bandgap reference voltage source and reference current sources. Bandgap source forms temperature, power supply and process variations independent voltage.

Reference current sources provide stable output currents which are independent of process/voltage/temperature variations if external resistor is used (CS = "0") or dependent of process corner and temperature of internal resistor rppd (CS = "1").

IP technology iHP SG25H5_EPIC SiGe BiCMOS 0.25 um

IP status: pre-silicon verification.

Area: 0.2 mm².



ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Conditions	Value			Unit
			min	typ.	max	
Supply voltage	V _{DD}	-	2.375	2.50	2.625	V
Operating temperature range	T _J	-	0	50	100	°C
Bandgap reference voltage	V _{REF_BG}	Vref_BG output	1.07	1.08	1.10	V
Bandgap reference voltage temperature dependence	ΔT V _{REF_BG}	Vref_BG output	-	-	1	%
Absolute bandgap reference voltage accuracy	ΔV _{REF_BG}	Vref_BG output	-	-	3	%
Reference output currents	I _{REF_1u}	Based on external/internal resistor	-	1	-	uA
	I _{REF_2u}			2		
	I _{REF_22u}			22		
Reference voltage load resistance	R _{LOAD}	Vref_BG output	1	-	-	MOhm
Current consumption	I _{DD}	Active mode: Total	-	130	-	uA
	I _{STB}	Standby mode	-	0.1	10	nA
Input logic high level	V _{IH}	For digital inputs	V _{DD} -0.25	-	V _{DD} +0.25	V
Input logic low level	V _{IL}		-0.25	-	0.25	V
Max load capacity	C _{load_max}	On Vref_BG output	-	-	5	pF