

Power Management Unit (2.3 – 3.0V output voltage, load current 20mA)
OVERVIEW

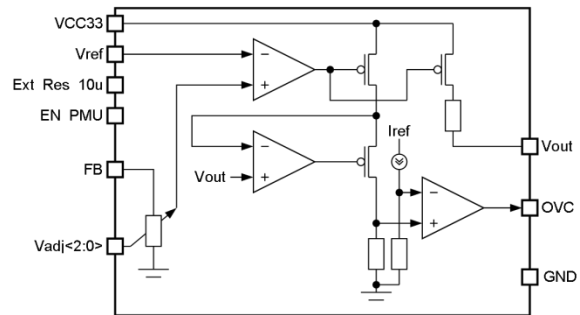
130iHP_PMU_01 is designed to form stabilized voltage with overcurrent indication (bit OVC). The block has configurable output voltage (2.3 / 2.4 / 2.5 / 2.6 / 2.7 / 2.8 / 2.9 / 3.0 V) with parameters specified for 20 mA output current.

Status of bit OVC = "1", when load current value exceeds 30 mA.

IP technology: iHP SiGe BiCMOS 130nm.

IP status: silicon proven.

Area: 0.066mm².


ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Condition	Value			Unit
			min	typ.	max	
Supply voltage	V_{cc33}	-	2.25	2.7	3.3	V
Temperature range	T	-	-45	25	+85	°C
Reference input voltage	V_{ref}	-	-	1.06	-	V
Reference input current	I_{ref}	-	-	10	-	uA
Current consumption	I_{cc33}	-	-	175	-	uA
Current consumption in a standby mode	I_{stb}	-	-	10	50	nA
Load current	I_{load}	-	-	-	20	mA
Overcurrent value	I_{OVC}	-	-	30	-	mA
Output voltage	V_{out}	$V_{adj<2:0>} = "000"$	-	2.3	-	V
		$V_{adj<2:0>} = "001"$	-	2.4	-	
		$V_{adj<2:0>} = "010"$	-	2.5	-	
		$V_{adj<2:0>} = "011"$	-	2.6	-	
		$V_{adj<2:0>} = "100"$	-	2.7	-	
		$V_{adj<2:0>} = "101"$	-	2.8	-	
		$V_{adj<2:0>} = "110"$	-	2.9	-	
		$V_{adj<2:0>} = "111"$	-	3.0	-	
Max load capacity	C_{load_max}	External	-	330	-	nF
Input logic high level	V_{IH}	For digital inputs	$V_{cc33}-0.5$	-	V_{cc33}	V
Input logic low level	V_{IL}		0	-	0.5	V