

Power on Reset

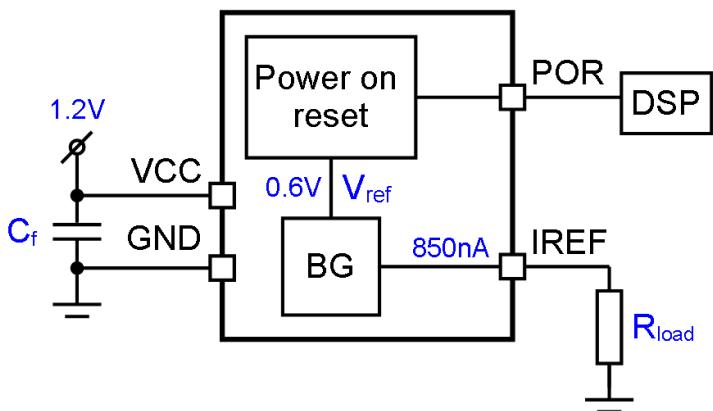
OVERVIEW

065TSMC_PoR_02 is a Power-on-Reset (PoR) circuit provides a reset signal to the chip when supply voltage reach required level. The block generates reset signal depending of the level supply voltage with hysteresis. It includes bandgap with reference current and Power on Reset block.

IP technology: TSMC CMOS 65 nm.

IP status: silicon proven.

Area: 0.062mm².



ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Conditions	Value			Units
			min	typ.	max	
Voltage supply	V _{CC}	-	1.1	1.2	1.3	V
Operating temperature range	T _j	-	-40	+27	+85	°C
Threshold Power on reset voltage	V _{THU}	-	-	1.001	-	V
	V _{THL}	-	-	0.952	-	
Reference current	I _{ref}	-	720	845	1003	nA
Time delay	T _{THH}	-	-	0.4	-	ns
	T _{THL}	-	-	1.2	-	ns
Current consumption	I _{CC}	V _{CC} = 1.2V	9	11	14	uA
Current consumption in standby mode	I _{stb}	-	-	35	-	pA
Output logic-level high	V _{OH}	-	0.8 V _{cc}	-	1.3	V
Output logic-level low	V _{OL}	-	-0.1	-	0.3	