

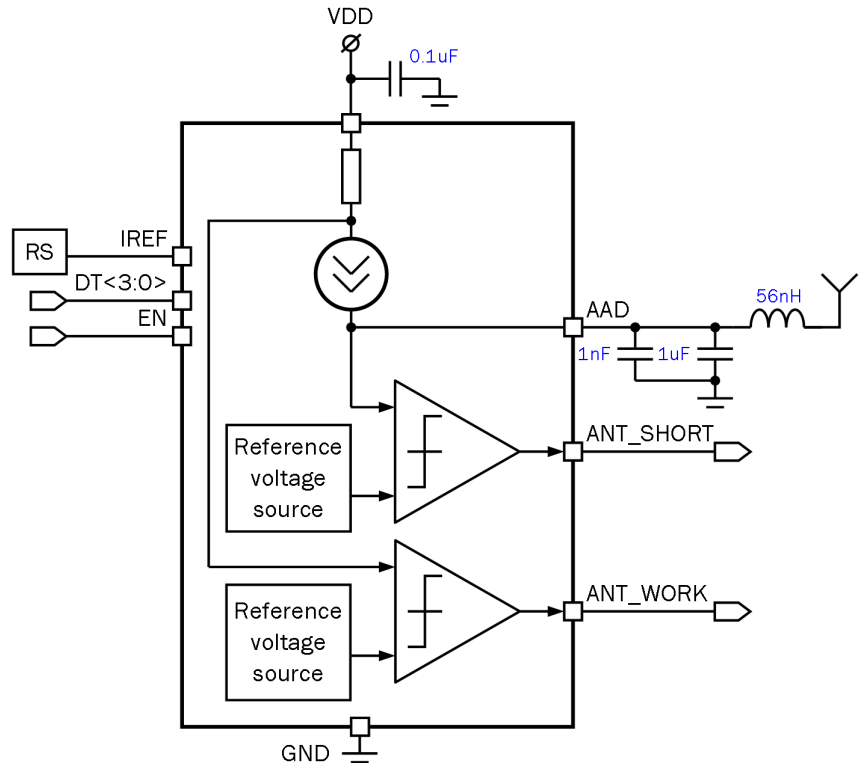
Active antenna detector with load current limit
OVERVIEW

180TSMC_AAD_02 is antenna detector which supplies an active antenna and is able to detect both open and short circuits and normal operation. A current limiter restricts the antenna current to a safe level in case of a short detection in order to protect an antenna. **ANT_SHORT** flag turns to logic one in case of short detection and **ANT_WORK** flag turns to logic one in case of supplied current is within programmed threshold.

IP technology: TSMC SiGe BiCMOS 180nm.

IP status: silicon proven.

Area: 0.124mm².


ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Conditions	Value			Units
			min	typ.	max	
Supply voltage	V _{DD}	-	2.8	3.3	3.6	V
Operating temperature range	T _j	-	-40	+27	+125	°C
Supply current	I _{DD}	-	-	140	-	uA
Adjustable nominal current	I _{nom}	DT<3:0>= "0000"	-	2	-	mA
		DT<3:0>= "1111"	-	32	-	
Detection current	I _{AW}	-	-	0.5×I _{nom}	-	mA
Short circuit protection current	I _{AS}	In case of the short circuit	-	2×I _{nom}	-	mA
Stand-by current	I _{STB}	-	-	-	25	nA
Input logic-level high	V _{IH}	For digital inputs EN, DT<3:0>	0.7V _{DD}	-	V _{DD} +0.25	V
Input logic-level low	V _{IL}		-0.25	-	0.3	V