

OVERVIEW

The SM5168BAV is a PLL ICs fabricated in NPC's Molybdenum-gate CMOS process. This is designed for use in transmitter/receiver stages in mobile telephones and similar applications.

And it built in LD pin of lock detect signal output.

FEATURES

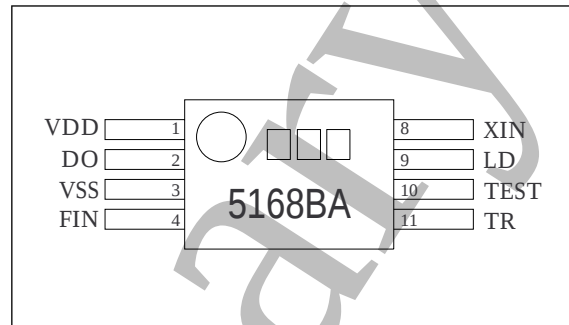
- 2.7 to 3.3 V operation
- 300 MHz maximum operating frequency ($V_{DD} = 2.7\text{ V}$)
- Low power consumption
- Charge pump outputs for passive filter
- Lock detect pin
- Power-save pin for reduced power dissipation
- -30 to $85\text{ }^{\circ}\text{C}$ operating temperature range
- 8-pin VSOP
- Molybdenum-gate CMOS process

APPLICATIONS

- Mobile communications
- PHS-type portable telephones
- Similar applications

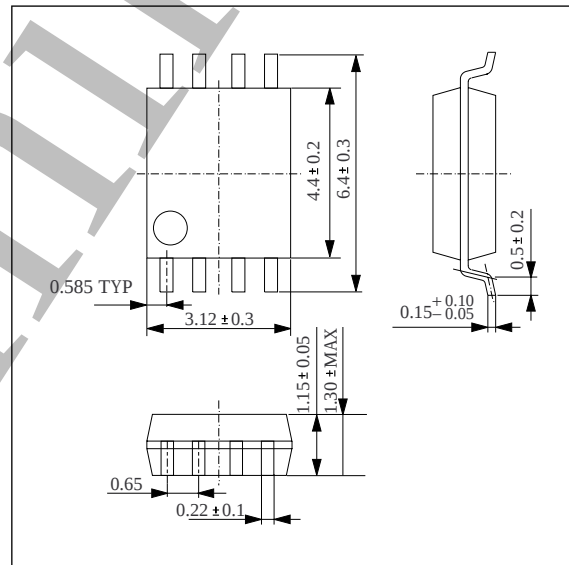
PINOUT

16-pin VSOP



PACKAGE DIMENSIONS

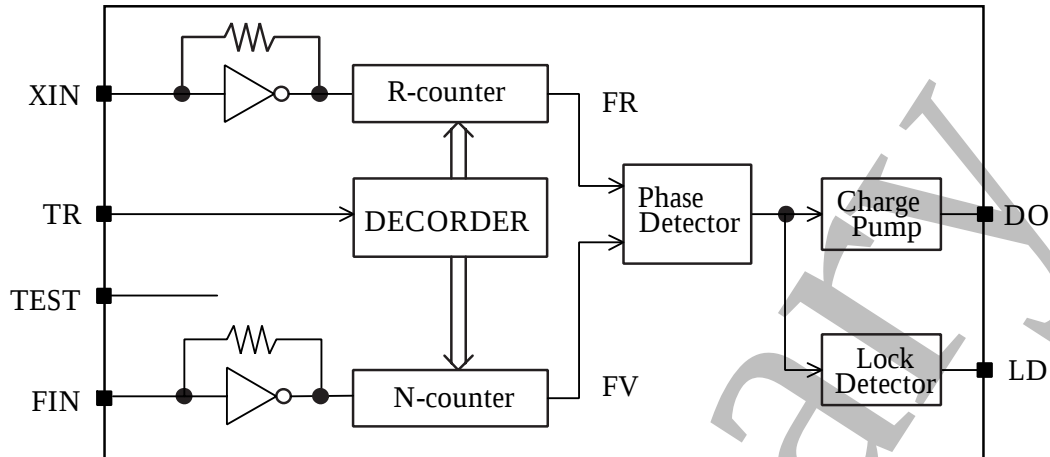
Unit: mm



Setting Frequency

TR	XIN reference input frequency	Reference divider count.	FIN input frequency	FIN divider count.	Phase comparator frequency
HIGH	14.4MHz	72	185.2MHz	926	200kHz
LOW	14.4MHz	72	260.2MHz	1301	200kHz

BLOCK DIAGRAM



PIN DESCRIPTION

Number	Name	I/O	Description
1	VDD	–	2.7 to 3.3V supply voltage pin.
2	DO	O	PLL phase comparator tristate output pin. Built-in charge pump means that this output can be connected to a low-pass filter. The output polarity is preset for connection to a passive filter.
3	VSS	–	Ground pin
4	FIN	I	PLL comparator frequency divider input pin. Feedback resistor built-in for AC-coupled inputs.
5	TR	I	
6	TEST	I	Test pin. should be Open or V _{SS}
7	LD	O	Unlock signal output pin. Low when unlock.
8	XIN	I	PLL reference frequency divider input pin. Feedback resistor built-in for AC-coupled inputs.

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