

General Description

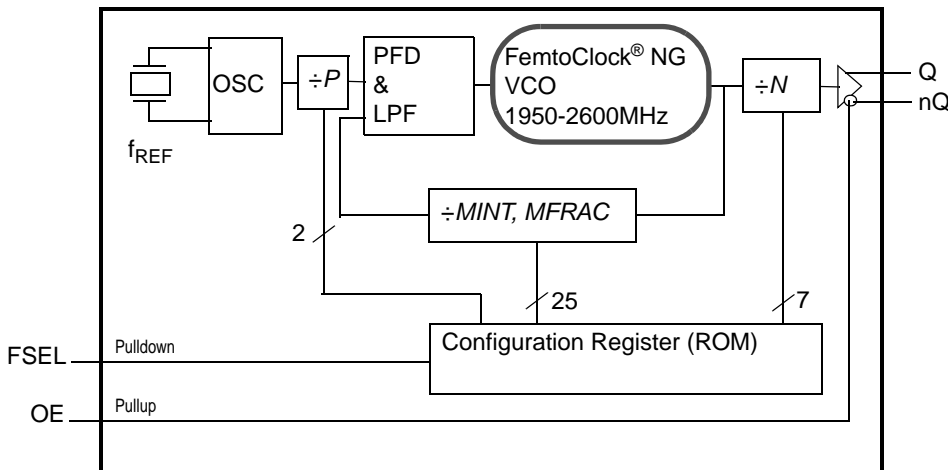
The IDT8N3D085 is a LVPECL Dual Frequency-Programmable Crystal Oscillator with very flexible frequency programming capabilities. The device uses IDT's fourth generation FemtoClock® NG technology for an optimum of high clock frequency and low phase noise performance. The device accepts 2.5V or 3.3V supply and is packaged in a small, lead-free (RoHS 6) 6-lead ceramic 5mm x 7mm x 1.55mm package.

The device can be programmed to any frequency in the range from 15.476MHz to 866.67MHz and from 975MHz to 1,300 MHz and supports a very high degree of frequency precision of 218Hz or better. One of two pre-set output frequencies is selected by the FSEL pin. The extended temperature range supports wireless infrastructure, telecommunication and networking end equipment requirements.

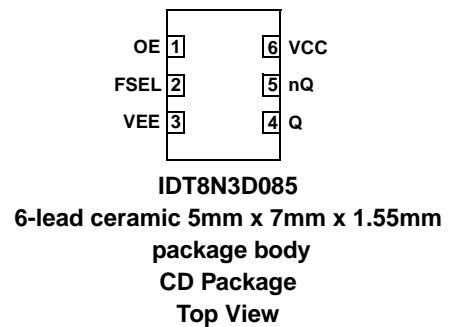
Features

- Fourth generation FemtoClock® NG technology
- Factory-programmable clock output frequency from 15.476MHz to 866.67MHz and from 975MHz to 1,300MHz
- Frequency programming resolution is 218Hz and better
- One 2.5V or 3.3V LVPECL clock output
- Output enable control (positive polarity), LVCMOS/LVTTL compatible
- LVCMOS compatible control inputs
- RMS phase jitter @ 156.25MHz (12kHz - 20MHz): 0.24ps (typical), integer PLL feedback configuration
- RMS phase jitter @ 156.25MHz (1kHz - 40MHz): 0.27ps (typical), integer PLL feedback configurationally
- 2.5V or 3.3V supply
- -40°C to 85°C ambient operating temperature
- Available in a lead-free (RoHS 6) 6-pin ceramic package

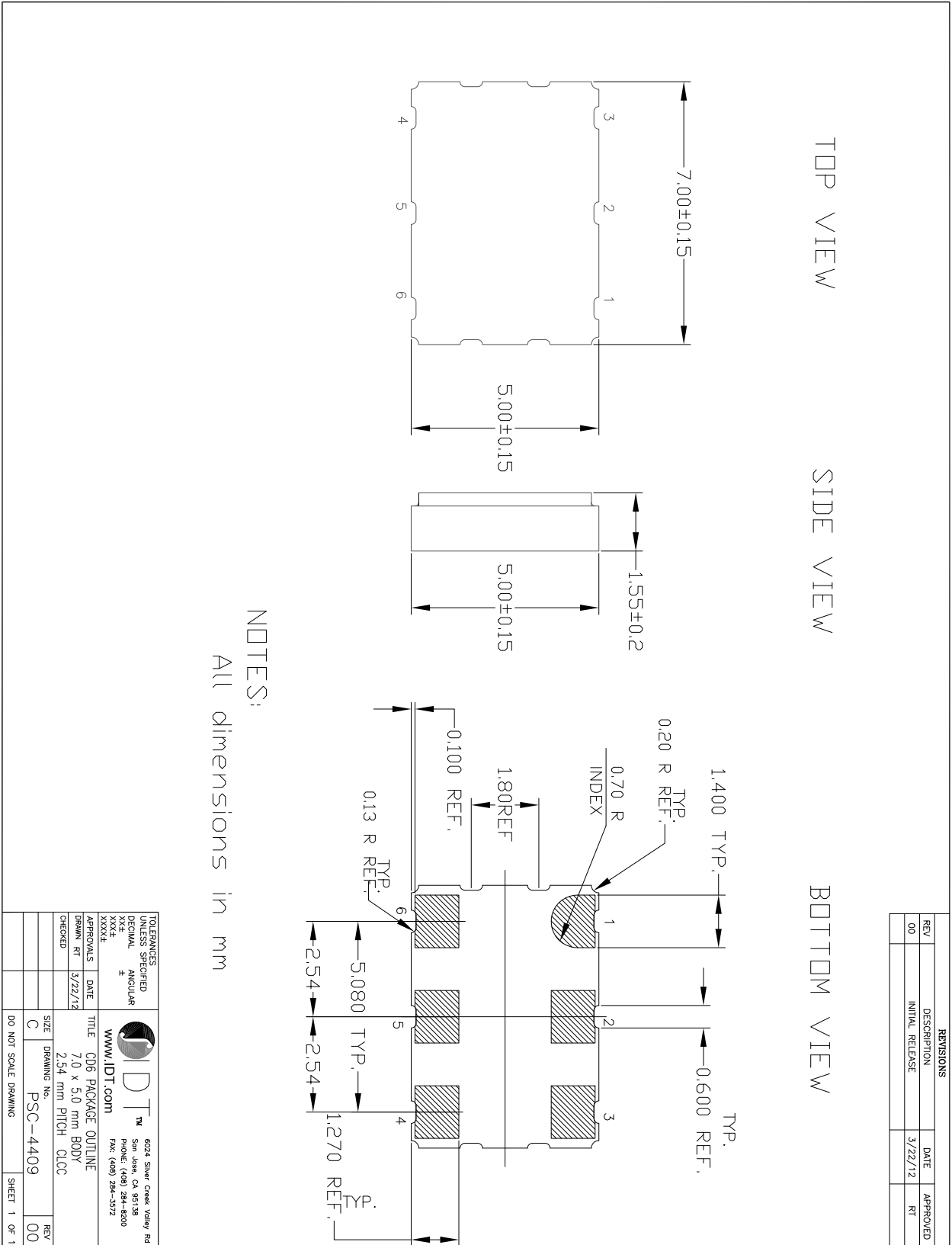
Block Diagram



Pin Assignment



Package Outline and Package Dimensions



NOTES:
All dimensions in mm

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	3/22/12	RT

TOLERANCES UNLESS SPECIFIED		6024 Silver Creek Valley Rd	
DECIMAL	±	www.IDT.com	San Jose, CA 95138
ANGULAR	±		PHONE: (408) 294-8200
XXXX			FAK: (408) 294-3872
DATE	3/22/12	TITLE	CD6 PACKAGE OUTLINE
APPROVALS		DRAWN	RT
CHECKED		SIZE	7.0 x 5.0 mm BODY
		DRAWING No.	2.54 mm PITCH CLCC
		REV	00
		DO NOT SCALE DRAWING	SHEET 1 OF 1