

## High-Performance Clock Generator(CTG510)

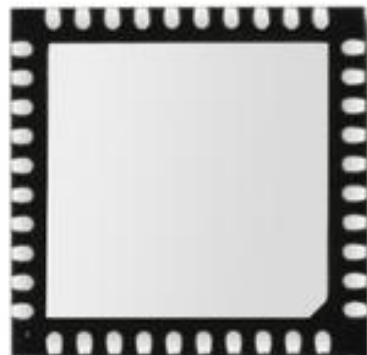
### Description

California Triangle provides high-performance, low-noise clock generators for communication, radar, measurement, and industrial control fields. Utilizing ADPLL (All-Digital Phase-Locked Loop) technology, it achieves optimal high-frequency low phase noise performance while featuring low power consumption and high PSNR capability, achieving phase jitter performance of less than 0.3ps RMS. It can output differential 100MHz, 125MHz, 156.25MHz, and single-ended 33.33MHz CPU clocks, while simultaneously outputting 6 channels of 25MHz buffered reference clocks.

### Product view



**CTG510 Front View**



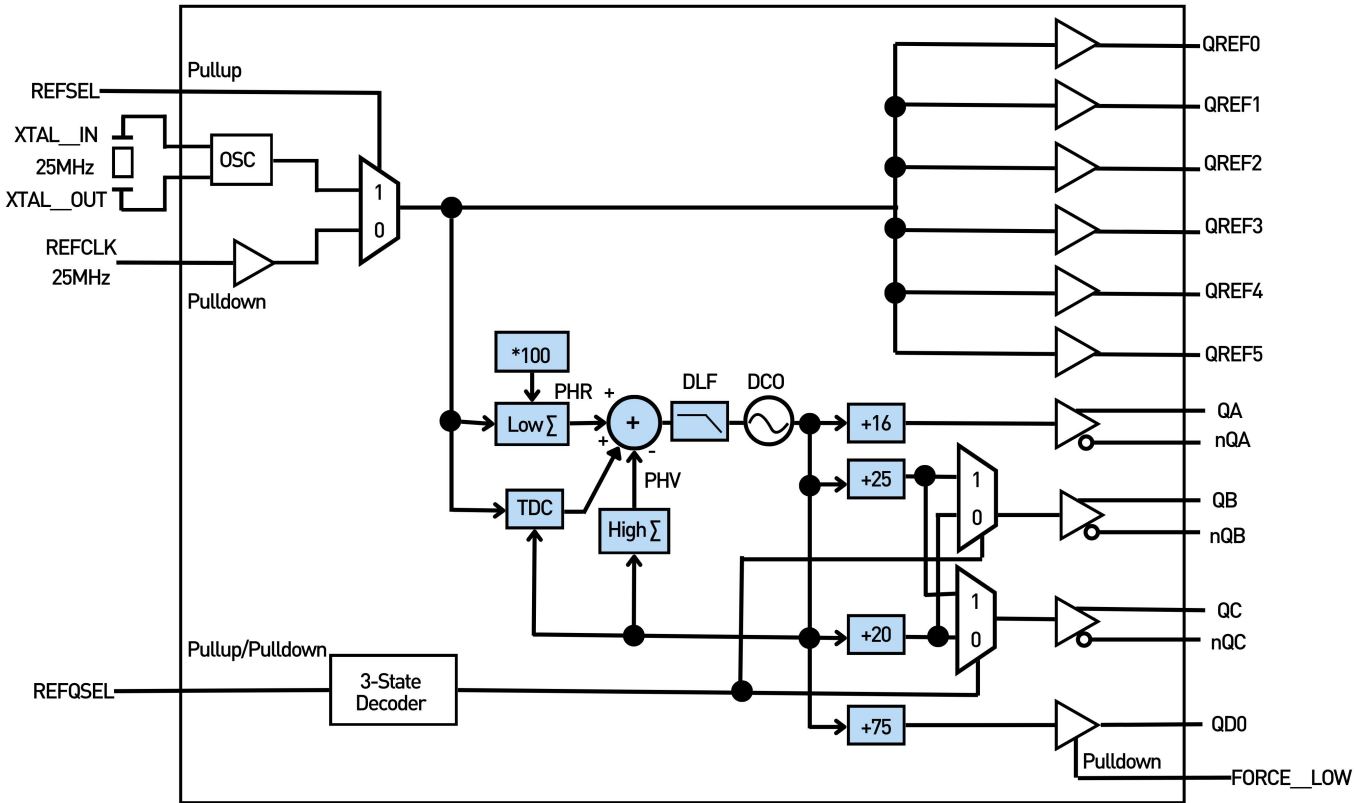
**CTG510 Rear View**



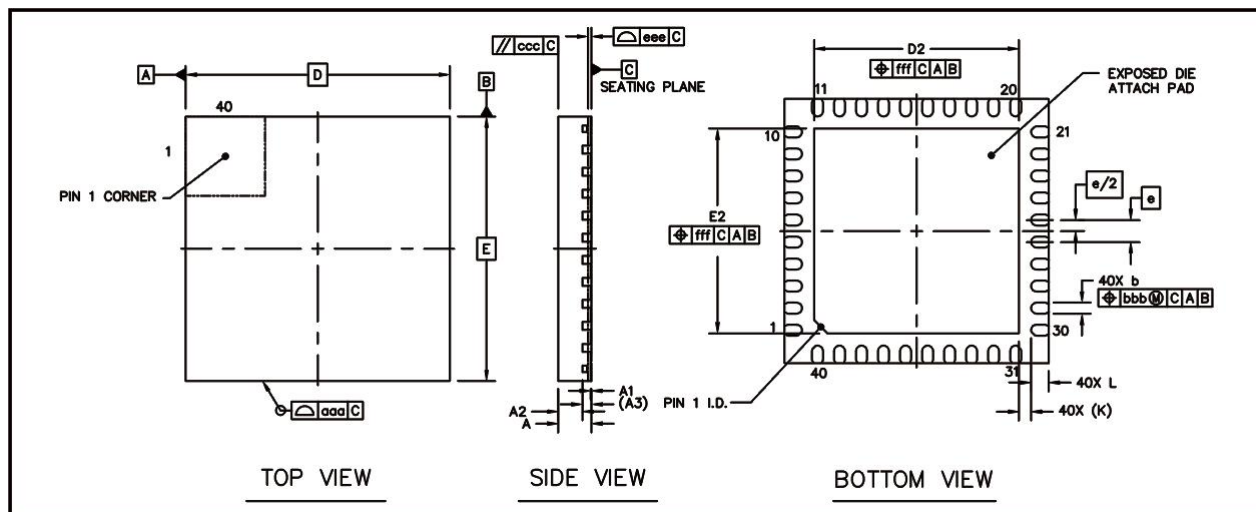
## Key Performance Indicators

Model	Input Frequency	Input Level Type	Number of Input Ports	Output Level Type	Output Frequency	Line Monitoring	Phase Jitter (12kHz to 20MHz)	Temperature Range	Packaging
CTG510	25MHz	LVCMS Crystal Oscillator	2	10	LVCMS LVPEC	156.25MHz 125MHz 100MHz 33.33MHz 25MHz	188fs (Typical Values)	-40~+85°C	QFN40

## Functional Diagram



## Packaging Diagram



## Packaging Information

		SYMBOL	MIN	NOM	MAX
TOTAL THICKNESS		A	0.7	0.75	0.8
STAND OFF		A1	0	0.02	0.05
MOLD THICKNESS		A2	---	0.55	---
L/F THICKNESS		A3	0.203 REF		
LEAD WIDTH		b	0.2	0.25	0.3
BODY SIZE	X	D	6 BSC		
	Y	E	6 BSC		
LEAD PITCH		e	0.5 BSC		
EP SIZE	X	D2	4.55	4.65	4.75
	Y	E2	4.55	4.65	4.75
LEAD LENGTH		L	0.3	0.4	0.5
LEAD TIP TO EXPOSED PAD EDGE		K	0.275 REF		
PACKAGE EDGE TOLERANCE		aaa	0.1		
MOLD FLATNESS		ccc	0.1		
COPLANARITY		eee	0.08		
LEAD OFFSET		bbb	0.1		
EXPOSED PAD OFFSET		fff	0.1		