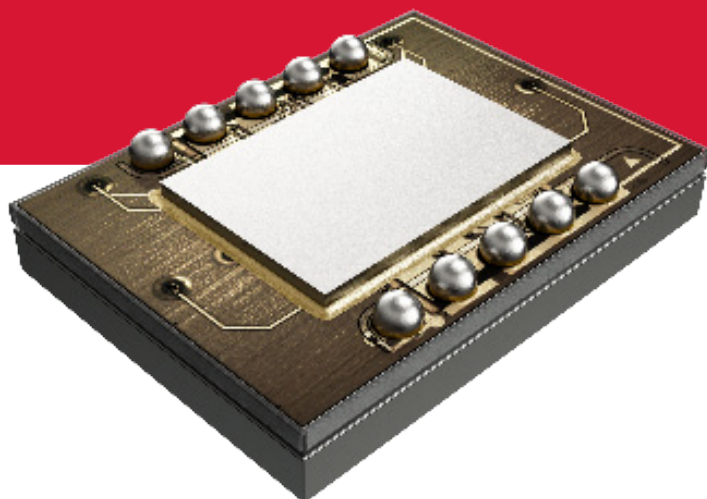


## CMR3000 3-axis Low Power Gyro for Consumer Electronics



- Low power
- High performance
- Small size

# CMR3000

## 3-axis Low Power Gyro for Consumer Electronics

### KEY FEATURES

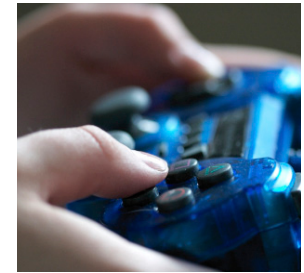
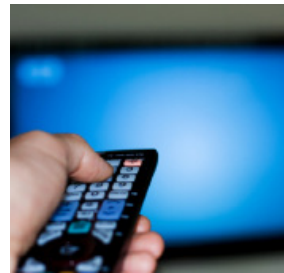
- 2.5 V - 3.6 V supply voltage, 1.6 V - 3.6 V digital I/O voltage
- Low 5 mA current consumption
- $\pm 2000$  °/s measurement range
- 20 Hz and 80 Hz user selectable bandwidths
- SPI and I<sup>2</sup>C digital interface
- Interrupt signal triggered by data ready
- Size 3.1x4.1x0.83 mm<sup>3</sup>
- Proven capacitive 3D-MEMS technology
- High shock durability
- RoHS compliant / lead free soldering



### APPLICATIONS

Thanks to the very low power consumption CMR3000 is particularly suitable for battery operated devices, such as

- Gaming input devices
- Computer peripherals and remote controllers
- Mobile phones



### CMR3000 GYROSCOPE TARGET PERFORMANCE CHARACTERISTICS

Parameter	Condition	Typical supply range 2.5-3.0 V			Extended supply range			Units
		Min	Nom	Max	Min	Nom	Max	
Vdd		2.5	2.7	3.0	-	3.3	-	V
Digital I/O Vdd	Vdd $\geq$ Digital I/O Vdd	1.6		3.0	-	3.3	-	V
Operating temperature		-40	-	85	-40	-	85	°C
Current consumption	Measurement	-	5		-	5	-	mA
	Stand-by	-	1.3		-	1.3	-	mA
	Power down	-	1		-	1	-	$\mu$ A
Measurement range	FS=2000 °/s	-2000	-	2000	-		-	°/s
Offset calibration error		-150	-	150		$\pm 150$		°/s
Offset temperature error	-40 ... +85 °C		0.5			0.5		°/s/°C
Sensitivity		-	1.33	-	-	1.33	-	Count/ °/s
Sensitivity calibration error		-5	-	+5	-	$\pm 5$	-	%
Sensitivity temperature error	-40 ... +85 °C	-	0.02			0.02		%/°C
Non-linearity	-1000 <math>\Omega</math> 1000 °/s	-	2		-	2	-	% FS
Output data rate, ODR			2000		-	2000	-	Hz
Bandwidth			20			20	-	Hz
			80			80	-	Hz
Integrated noise stdev	20 Hz BW	-	0.9		-	0.9	-	°/s
Turn on time		-	200		-	200	-	ms
I <sup>2</sup> C clock rate		-	-	400	-	-	400	kHz
SPI clock rate		-	-	500	-	-	500	kHz

For more detailed information, please check CMR3000 Datasheet available at [www.vtitechnologies.com](http://www.vtitechnologies.com).

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