

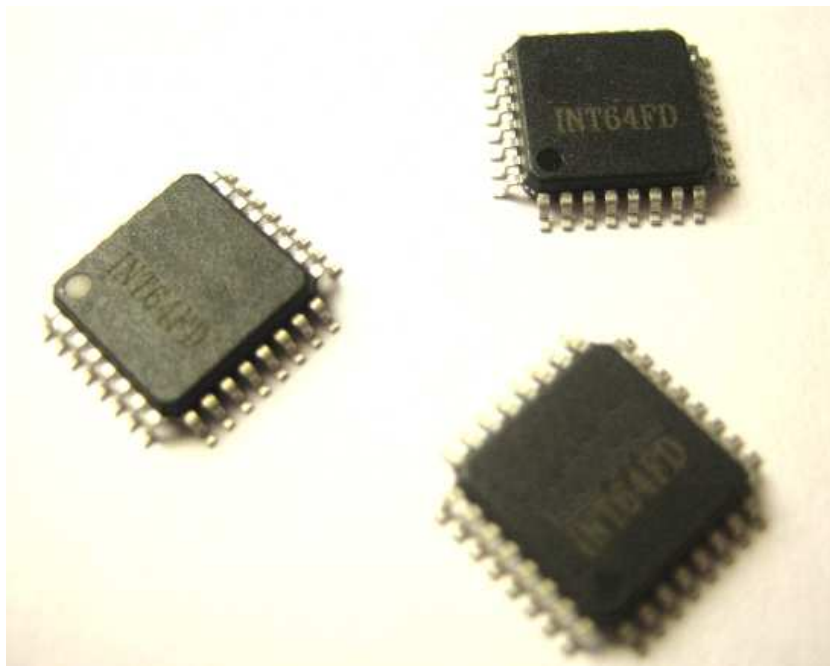


## Metrology Designed ASIC

- ❑ **GE120001** 24-bit 3-axis AB phase counting IC



- ❑ **S2501** Sinusoid signal Interpolation IC





**GE120001 Specifications :**

<b>Applications</b>
1. Linear scale counting 2. Rotary encoder counting
<b>Hardware Specifications</b>
1. Quadrature counter for A, B phase input. 2. 3-axis independent synchronous 24-bit Up/Down Counter. 3. 3-axis's counter can be latch simultaneously by software or Ext0, Ext1. 4. Input signal of A,B,RI,Home and Ext0,Ext1 are digital filtered for noise immunity. 5. Full Speed RI (Reference Index) signal search. 6. Provide RI flexible combination with/without Home signal. 7. Three independent comparator for interrupt output. 8. Error output if the input noise over the filter band width. 9. A,B,RI high or low can be read out. 10. Polarity of all input signals are programmable (A,B,RI,Home,Ext0,Ext1). 11. Single 5V operation and clock frequency from DC to 40MHz. 12. TTL/CMOS compatible I/Os and easily interface to popular microcontroller or PC. 13. LQFP64 package and 0.6 $\mu$ m process reduce power consumption and PCB space.



**S2501 Specifications :**

<b>Applications</b>
<ol style="list-style-type: none"><li>1. Linear scale sinusoid signal Interpolation</li><li>2. Rotary encoder sinusoid signal Interpolation</li><li>3. Interferometer sinusoid signal Interpolation</li></ol>
<b>Hardware Specifications</b>
<ol style="list-style-type: none"><li>1. Input A+,A-,B+,B- are differential sine and cosine signals.</li><li>2. Output single end TTL square waves.</li><li>3. The interpolation value is x1,x2,x5 and x10.</li><li>4. Input A,B can be Current source or voltage source.</li><li>5. Amplitude, DC level, Phase of A,B signal are adjustable.</li><li>6. Adjusted signal of A,B can be probed.</li><li>7. LQFP32 package.</li></ol>



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