ISSI pFlash®
Over 4 Billion Units Shipped!

Here a pFlash®, there a pFlash®, Everywhere a pFlash®!

Key features of ISSI 25-Series LD/WD family

- Addressing a Serial Flash SAM of 400M$ for ≤4Mb (TAM: 1.6B$)
- 256Kb, 512Kb, 1Mb, 2Mb, and 4Mb parts in production
- Industry-standard 8-pin SOIC (208/150 mil), USON, WSON, and thin VVSOP packages available
- Low pin count simplifies board layout, reduces footprint and overall system cost in embedded designs
- Uniform 4 KB sectors for parameter storage
- Software and hardware write protection for enhanced security and IP protection (OTP)
- Fast read performance for quick boot
- Built upon proprietary pFlash® technology

pFlash® technology offers:

- Lower power consumption
- High-speed programming
- High-speed erase capabilities
- Industry’s best solid data retention (Min 20 years and 200K cycles of endurance)

pFlash® Advantage:

- The low programming/erase current enables Test-by-Performance. This comprises of extracting the statistical behavior of all critical parameters and by setting the test specification to remove extrinsic distributions
- pFlash® technology adopts built-in-tests to remove infant mortality by facilitating cell characterization and implementing comprehensive stress modes to provide the lowest DPPM on the market (<0.013 DPPM 2012)

Applications:

- pFlash®’s High-Quality and Reliability parts are used in code storage applications in consumer electronics such as: graphics cards, notebook cameras, PC bios, LCD monitors, HDD, ODD, Bluetooth, cordless phones, NFC, fingerprint, DSC, Zigbee, and various other industrial and medical applications.
- This family of low-density parts are offered in voltages ranging from 1.8V to 3.6V. With read performances of up to 100Mhz for fast application boot, coupled with industrial temp ranges, high quality, and reliability, it’s no wonder ISSI’s pFlash® technology is the leading technology of choice for code storage in HDD markets.

ISSI®
June 2013 • 1940 Zanker Rd., San Jose, CA. 95112 • Tel: 408.969.6600 • Support: flash@issi.com • www.issi.com
**NOR Serial Flash:**

<table>
<thead>
<tr>
<th>Den</th>
<th>Part No.</th>
<th>Dual SPI</th>
<th>Voltage (V)</th>
<th>Frequency (MHz)</th>
<th>Package Type*</th>
<th>Temperature**</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>256K</td>
<td>IS25CD025</td>
<td>●</td>
<td>2.7-3.6</td>
<td>33/100</td>
<td>JN, JD</td>
<td>E, A1, A2</td>
<td>Production</td>
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<td>512K</td>
<td>IS25CD512</td>
<td>●</td>
<td>2.7-3.6</td>
<td>33/100</td>
<td>JN, JD, JK, JU</td>
<td>E, A1, A2</td>
<td>Production</td>
</tr>
<tr>
<td>1M</td>
<td>IS25CD010</td>
<td>●</td>
<td>2.7-3.6</td>
<td>33/100</td>
<td>JN, JD</td>
<td>E, A1, A2</td>
<td>Production</td>
</tr>
<tr>
<td>2M</td>
<td>IS25LD020</td>
<td>●</td>
<td>2.3-3.6</td>
<td>33/100</td>
<td>JN, JD, JK, JV</td>
<td>E, A1, A2</td>
<td>Production</td>
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<tr>
<td>2M</td>
<td>IS25WD020</td>
<td>●</td>
<td>1.65-1.95</td>
<td>30/80</td>
<td>JN, JB, JK, JV</td>
<td>E, A1, A2</td>
<td>Production</td>
</tr>
<tr>
<td>4M</td>
<td>IS25LD040</td>
<td>●</td>
<td>2.3-3.6</td>
<td>33/100</td>
<td>JN, JB, JK, JV</td>
<td>E, A1, A2</td>
<td>Production</td>
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<tr>
<td>4M</td>
<td>IS25WD040</td>
<td>●</td>
<td>1.65-1.95</td>
<td>33/80</td>
<td>JN, JB, JK, JV</td>
<td>E, A1, A2</td>
<td>Production</td>
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</table>

For KGD or WLCSP contact factory

**NOR ISA Flash:**

<table>
<thead>
<tr>
<th>Den</th>
<th>Part No.</th>
<th>Type</th>
<th>Voltage (V)</th>
<th>Speed (ns)</th>
<th>Package Type*</th>
<th>Temperature**</th>
<th>Status</th>
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</thead>
<tbody>
<tr>
<td>512K</td>
<td>IS39LV512</td>
<td>x8</td>
<td>2.7-3.6</td>
<td>70</td>
<td>70JCE, 70VCE</td>
<td>I, A1</td>
<td>Production</td>
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<tr>
<td>1M</td>
<td>IS39LV010</td>
<td>x8</td>
<td>2.7-3.6</td>
<td>70</td>
<td>70JCE, 70VCE</td>
<td>I, A1</td>
<td>Production</td>
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<tr>
<td>4M</td>
<td>IS39LV040</td>
<td>x8</td>
<td>2.7-3.6</td>
<td>70</td>
<td>70JCE, 70VCE</td>
<td>0°C to 85°C</td>
<td>Production</td>
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**NOR FWH Flash**

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<th>Den</th>
<th>Part No.</th>
<th>Type</th>
<th>Voltage (V)</th>
<th>Speed (ns)</th>
<th>Package Type*</th>
<th>Temperature**</th>
<th>Status</th>
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<td>4M</td>
<td>IS49FL004T</td>
<td>x8</td>
<td>3.0-3.6</td>
<td>33</td>
<td>33VCE, 33JCE</td>
<td>0°C to 85°C</td>
<td>Production</td>
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</tbody>
</table>

**Package Types**

- JN = 8 pin SOIC 150mil
- JB = 8 pin SOIC 208mil
- JD = 8 pin TSSOP
- JK = 8 pin WS0N (5x6 mm)
- JU = 8 pin US0N (2x3mm)
- JV = 8 pin VVSOP 150mil
- 33JCE = 32 pin PLCC
- 33VCE = 32 pin VSOP(8x14mm)

**Temperature**

- I = Industrial grade (-40C to +85C)
- E = Extended grade (-40C to +105C)
- A1 = Automotive grade (-40C to +85C) (Call Factory)
- A2 = Automotive grade (-40C to +105C) (Call Factory)