Nexperia has developed the X2SON packages, part of MicroPak packages, to provide the smallest footprint for logic functions while ensuring pad pitch remains 0.4mm or over, making step-down masks unnecessary. Our X2SON packages are available in low-power AUP, AXP, LV and LVC technology families covering over one hundred logic functions. Additional types are continuously added and the miniaturization process continues with the recent introduction of X2SON4. This new 4-pin package option reduces footprint by 44% compared to the 5-pin X2SON5.

### Key features
- Smaller footprint (up to -36% vs. GF & -25% vs. GN packages)
- High contact area-to-chip ratio and enhanced durability
- RoHS & dark-green compliant with NiPdAu leadframe finish
- Low profile height (0.35mm) and low width (0.8mm)

### Applications
- Mobile devices
- Portable computing
- IoT & wearables
- Consumer electronics

### Benefits
- Lower PCB costs, easier placement and miniaturization
- No step-down stencil, lowering cost & facilitating assembly
- Future-proof, part of Nexperia’s recommended packages

Most Mini Logic functions from the Nexperia portfolio are now offered in X2SON, our smallest-footprint logic plastic packages. The innovative X2SON package with GX/GX4 suffix was introduced in 2012 with X2SON5, followed by X2SON6 in 2015, X2SON8 in 2016 and X2SON4 in 2018. Nexperia has been leading package innovation in logic and driving the trend toward smaller packages and more power-efficient technologies and will continue to do so.

<table>
<thead>
<tr>
<th>Package name</th>
<th>Package version</th>
<th>L (mm)</th>
<th>W (mm)</th>
<th>H (mm)</th>
<th>P (mm)</th>
<th>Suffix</th>
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<tr>
<td>X2SON4</td>
<td>SOT1269</td>
<td>0.6</td>
<td>0.6</td>
<td>0.32</td>
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<td>GX4</td>
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<tr>
<td>X2SON5</td>
<td>SOT1226</td>
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<td>≥ 0.4</td>
<td>GX</td>
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<tr>
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<td>SOT1255</td>
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<td>0.8</td>
<td>0.35</td>
<td>≥ 0.4</td>
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<tr>
<td>X2SON8</td>
<td>SOT1233</td>
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<td>0.8</td>
<td>0.35</td>
<td>≥ 0.4</td>
<td>GX</td>
</tr>
</tbody>
</table>

Ultra-small 4, 5, 6 & 8-pin MicroPak packages with ≥ 0.4 mm pitch
Available functions

- Buffers & Inverters
- Gates (AND, NAND, OR, NOR, XOR, XNOR)
- Flip-Flops
- Configurable Gates
- Translators
- Analog Switches

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