130G/LP/EE
130 nm Process Technologies

Enabling Connected Intelligence
GLOBALFOUNDRIES 130 nm process technology platform is most suited for general purpose SoC designs and power- and price-sensitive applications. The comprehensive, highly-configurable and production-proven 130 nm platform solution enables integration of logic, RF, analog and non-volatile memory to provide a cost effective solution. GF is also the first foundry to offer a 130 nm EEPROM solution. Further die cost reduction is made possible with the 110TS platform, which is shipping in volume production.

Target Applications and Solutions
- Bluetooth SoC (110TS)
- Cellular (GSM/EDGE, TD-SCDMA) Radio (130LP)
- WiFi Radio (130G, 130LP)
- Active RFID (130G, 130LP/EE)
- Mobile TV Tuner (130G, 130LP)
- Smart card / Bank card (130LP/EE)
- MEMS ASIC (130G, 130LP)
- Drones (130LP)
**Technology Overview**

- **130LP**: 1.5 V (Core) and 3.3 V (I/O) solutions
  - 2 core device Vt's
  - Mixed-signal, high voltage, RF plug-in modules
- **130G**: 1.2 V (Core) and 2.5/3.3 V (I/O) solutions
  - 3 core device Vt's
  - Mixed-signal, RF plug-in modules
- **110TS**: 1.2 V (Core) and 3.3 V (I/O)
  - Shrink from 130G
  - Comparable performance to 130G
- EEPROM Module (130LP): High endurance, low power
- Twin retrograde wells on P-substrate
- MIM capacitor, eFuse fuse/macro
- High quality passives, diodes and inductors
- Standard temperature range: –40°C to 125°C

**GLOBALSOLUTIONS® Design and Manufacturing Ecosystem**

GLOBALSOLUTIONS is the sum of our internal resources and ecosystem partners, combined to efficiently enable the fastest time-to-volume. This ecosystem includes partners in all aspects of design enablement and turnkey services, OPC and mask operations, and advanced capabilities in assembly solutions.

**IP Overview**

The comprehensive 130 nm Platform IP portfolio includes a wide range of silicon-proven high performance, power-optimized solutions for a broad set of applications.

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<th>Memory</th>
<th>Analog IP</th>
<th>Interface IP</th>
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<td>High density memories (130LP)</td>
<td>DC-DC, PLL</td>
<td>SPIO (PCI)</td>
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<td>Standard cell 1.2 V (130G)</td>
<td>High speed memories (130LP)</td>
<td>Video DAC</td>
<td>USB 2.0 OTG/PHY</td>
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<td>GPIO</td>
<td>ROM Compiler</td>
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Note: IP options vary by process selection. Contact GF for IP availability.