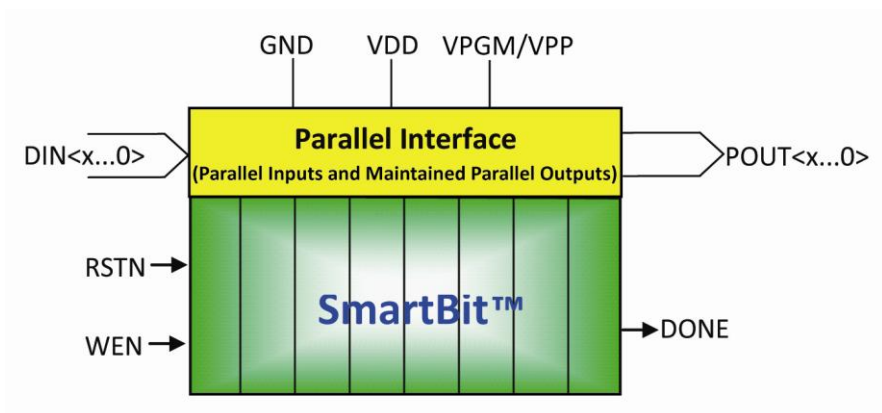


NovoBits



Features

- Register architecture
- Parallel IN / Parallel OUT
- Access times <10nsec
- DONE Programming Signal
- Low Power Sleep Mode
- Low Programming Current < 15 mA
- 100% Reliability - No Tail Bit Failures
- 30+ years Data Retention

Product Description

NovoBits, a register product built on the reliability-leading Novoblox SmartBit™ technology, is Novocell's alternative to the foundry specific e-fuse. *NovoBit* blocks are an area efficient solution made up of dense 8 bit modular blocks that can meet the smallest of OTP needs. Like the original Novoblox OTP, *NovoBits* programs dynamically until all bits are programmed ensuring no tail bit failures.



NovoBits targets applications with small NVM requirements area constraints. Novocell's technology is foundry independent, allowing maximum flexibility and design portability when evaluating second-source alternatives.

Product Specifications

Custom aspect ratios can be provided. Please visit www.novocellsemi.com or call 724-983-0600 for more detailed information.

The Irreversible Memory

NovoBits vs. Serial

| Features | NovoBits | Serial |
|---------------------------------|---|---|
| Technology | | |
| SmartBit Technology | ● | ● |
| Done Signal | ● | ● |
| Low Programming Current | ● | ● |
| Sleep Mode | ● | ● |
| 3 Metal Layers | ● | ● |
| Over-routing allowed | ● | ● |
| Charge Pump (as needed) | ● | ● |
| Architectures | | |
| Register Architecture | ● | |
| Serial Architecture | | ● |
| Modular 8 bit | ● | |
| 8 bit block - 256 bits | ● | |
| 32 - 256 bits | | ● |
| Cascadable | ● | ● |
| Interface | | |
| Serial IN / Serial OUT | | ● |
| Parallel IN / Parallel OUT | ● | |
| Maintained Parallel Outputs | ● | ● |
| Shift Clock | | ● |
| Preview Mode | | ● |
| Inputs | | |
| I/O 1.8V/3.3V | ● | ● |
| I/O 1.8V/5.0V | ● | ● |
| Area Comparisons For 64 bits |  |  |

The Irreversible Memory