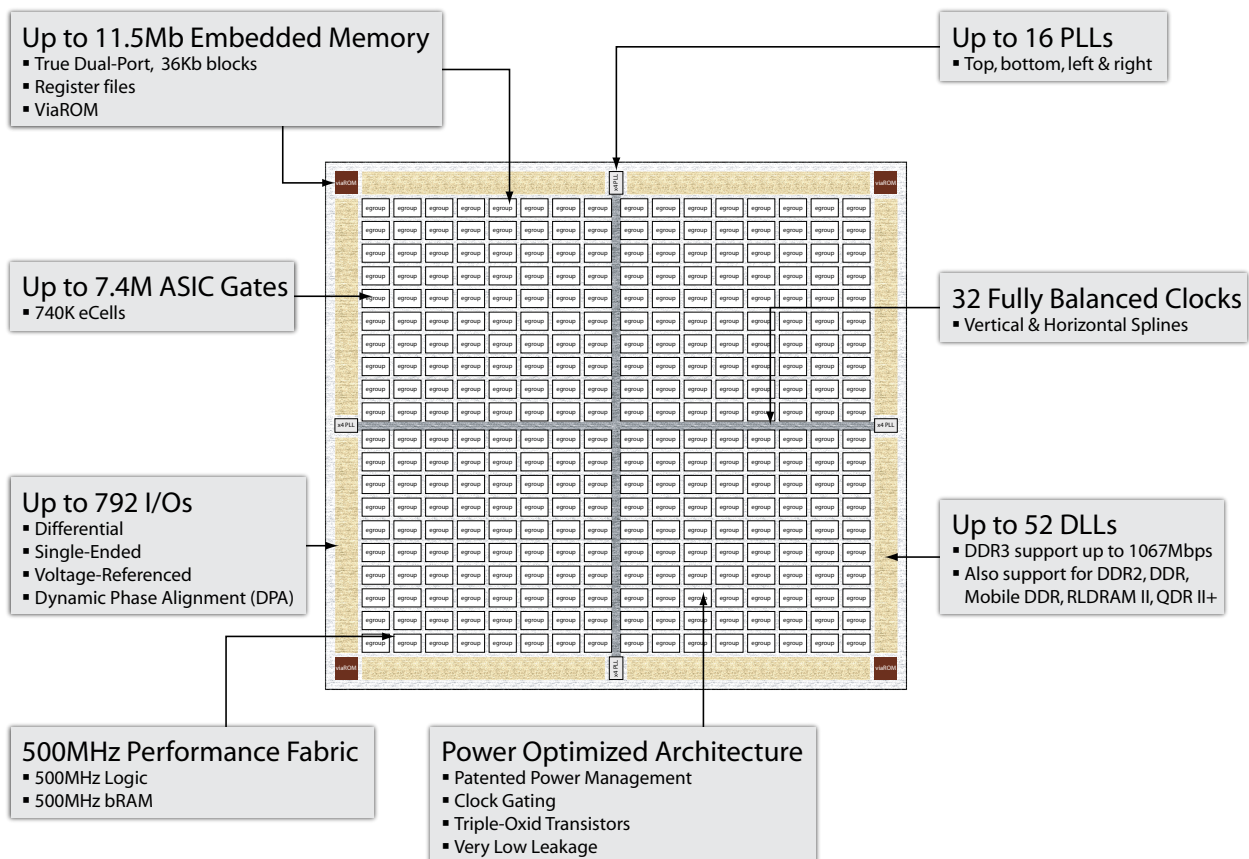


## 45nm NEW ASIC Affordable for All

### eASIC Nextreme-2 Overview

eASIC Nextreme-2 is a family of NEW ASIC devices, manufactured on a 45nm CMOS process, and built using eASIC's patented single-via customization technology. The eASIC Nextreme-2 family provides ASIC-like performance, power and low unit-cost, combined with a FPGA-like design flow and rapid delivery of devices. eASIC Nextreme-2 is built on a breakthrough configurable fabric which combines an efficient Look-Up-Table (LUT) based logic with a single via-layer customized interconnect. eASIC Nextreme-2 delivers many enhancements and advantages for designers considering standard cell ASICs, FPGAs and ASSPs.



## Cost Advantage

A simple, area efficient, single Via routing scheme, enables eASIC Nextreme-2 devices to be manufactured within a much smaller die area than equivalent density SRAM FPGAs, thereby reducing device cost. In addition, as only one layer needs to be programmed for each customer design, the up-front development cost, time and risk is significantly lower than that of cell-based ASIC.

## Power Advantage

Use eASIC Nextreme-2 to reduce power consumption by up to 80% compared to FPGAs:

- Static Power Reduction Techniques**  
 Low static power through use of 45nm Low Power (LP) CMOS process, triple-oxide transistors and eASIC's patented **GreenPowerVia** technology. **GreenPowerVia** powers off all unused eCells, bRAMs, and Register Files.
- Dynamic Power Reduction Techniques**  
 Techniques such as multiple core voltage options (down to 1.0V), clock gating and via-based interconnect also help to minimize dynamic power.

## eASIC Nextreme-2 Family

	N2X260	N2X380	N2X550	N2X740
eCells	258,048	387,072	552,960	737,280
Equivalent Gates (Millions)	2.6	3.9	5.6	7.4
ViaROM (# of blocks)	4	4	4	4
ViaROM (Kbits)	1,024	1,024	1,024	1,024
bRAM (# of blocks)	112	168	240	320
bRAM (Kbits)	4,032	6,048	8,640	11,520
Register File (# of blocks)	224	336	480	640
Register File (Kbits)	112	168	240	320
PLLs	16	16	16	16
DLLs	28	36	52	52
<b>Packages and User IO</b>				
BG480 (23x23)	334	314		
FC480 (23x23)	338	338		
BG484 (23x23)	305	305		
BG672 (27x27)		452	458	458
FC672 (27x27)		482	468	468
FC780 (29x29)	480	480		
BG896 (31x31)			600	
FC896 (31x31)			620	620
FC1152 (35x35)			792	792

## Get Started

To learn more on how you can replace your expensive, power hungry FPGAs or your legacy ASICs visit [www.easic.com](http://www.easic.com) or contact your local eASIC representative.

### TRADEMARK INFORMATION

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