Agenda

- Company
- Market Opportunity
- NexGen Design Approach and Products
- Product Demonstration
- Strategic Partners
- Future Directions
Company Profile

Corporate Objective:

Achieve sustainable share of the high-performance x86 microprocessor market

by

Utilizing our industry leading processor technologies to deliver 586-class performance to mainstream PC users
Company Profile

- Founded in 1986
- Superscalar high-end x86 project started 1988
- $90M invested to date
- Principal investors include:
  - Kleiner-Perkins
  - Compaq
  - Paine-Webber
  - Olivetti
  - ASCII
  - Harvard University
Affordability Driving High Performance Market

- Intense Competition in PC Marketplace
- Trend toward Low-cost, "High Performance CPU" Based systems

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendors</td>
<td>1</td>
<td>29</td>
<td>10</td>
<td>Many</td>
</tr>
<tr>
<td>Price</td>
<td>$6000</td>
<td>$2200</td>
<td>$3595-$18000</td>
<td>$2495-$5500</td>
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</tbody>
</table>

Increasing Demand for High Performance PC's
Affordability Driving High Performance Market

486DX2/66+5th+6th
Sales (MU)

SOURCE: Robertson Stephens, 2/94

Enormous Market Potential
Introducing...

NexGen's Nx586 Family of Microprocessors

- Highest Level of x86 Performance
  - First product in a new from the ground-up line to incorporate NexGen's patented RISC86™ microarchitecture
  - All major performance elements of 586-class, 5th generation processors
  - Introduced at 60 & 66MHz clock rates

- Fully x86 binary compatible

- Highly affordable, both on a CPU and system level
  - Opens up 586-class performance to mainstream users
## NexGen's High Performance Design

<table>
<thead>
<tr>
<th>5th Generation Performance Elements</th>
<th>NexGen Nx586</th>
<th>Other 586-class Processors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superscalar Execution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L1 Code and Data Caches on-chip</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Branch Prediction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>64-bit buses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Performance Floating Point</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### NexGen Advantages

- RISC86™ Microarchitecture
- On-chip L2 Write-back Cache Controller
- Optional FPU

Most advanced technology in x86 processors
Internal RISC86™ Microarchitecture

1) Direct hardware support for x86 architecture
   ===> Designed from the ground-up to be an x86 performance processor

2) Includes register renaming and speculative execution to reduce interlocks between execution units
   ===> Higher x86 Performance

3) Reduced hardware to implement execution units
   ===> Less chip space to add units
   ===> Easier to add additional units

4) Execution units can be specialized
   ===> Add those units which relieve bottlenecks

Easily extensible for future products
Superior L2 Cache & FPU Partitioning

Other High Performance x86 Processors

Integrated L2 cache controller yields:
- Guaranteed full-speed L2 operation
- Inexpensive SRAM at full speed

NexGen Nx586 Processor

Modular FPU yields lower entry price

Integrated L2 Cache Controller yields:
- 1/2 speed system logic with no performance loss

Superior Partitioning Yields:
- Consistent High Performance
- Lower Overall System Cost

NexGen
## Nx586 Processor Benchmark Performance

<table>
<thead>
<tr>
<th>TEST</th>
<th>Nx586-60</th>
<th>Nx586-66</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landmark 2.0</td>
<td>375</td>
<td>417</td>
</tr>
<tr>
<td>PowerMeter 1.81</td>
<td>25.6</td>
<td>28.4</td>
</tr>
<tr>
<td>Norton SI 7.0</td>
<td>178</td>
<td>198</td>
</tr>
<tr>
<td>BYTE 2.4 Desktop</td>
<td>3.55</td>
<td>3.91</td>
</tr>
<tr>
<td>BYTE 2.4 Notebook</td>
<td>8.32</td>
<td>9.15</td>
</tr>
</tbody>
</table>
Nx586 Processor System Performance

Winstone '94 Performance Range

- 100
- 90
- 80
- 70
- 60
- 50
- 40
- 30
- 20
- 10
- 0

0

60MHz

66MHz

NexGen
<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clock Rates:</td>
<td>60, 66 Mhz</td>
</tr>
<tr>
<td>L1 Cache:</td>
<td>On-chip 16K byte instruction</td>
</tr>
<tr>
<td></td>
<td>On-chip 16K byte data</td>
</tr>
<tr>
<td>L2 Cache:</td>
<td>On-chip write-back controller</td>
</tr>
<tr>
<td></td>
<td>for 256K or 1M byte L2 cache</td>
</tr>
<tr>
<td>Manufacturing Technology:</td>
<td>0.5 micron CMOS</td>
</tr>
<tr>
<td>Transistor Count:</td>
<td></td>
</tr>
<tr>
<td>Nx586</td>
<td>3.5 million</td>
</tr>
<tr>
<td>Nx587</td>
<td>0.7 million</td>
</tr>
</tbody>
</table>
Compatibility

- 5 years of internal design and simulation
  - Detailed understanding of x86 operations
  - Pre-silicon simulation tests to verify compatible operation

- Major internal application testing
  - Scripts of all major applications & operating systems
  - Automated Testing Equipment
  - External scripts and benchmark

- XXCAL Highest Seal of Compatibility - Platinum (in process)

Fully x86 binary-code compatible
Complete Solution

- System Logic Developed by NexGen
  - NxVL: High performance system logic chip for VL & ISA standard buses
    - 30 to 40 MHz VL Speeds
    - Decoupled VL and CPU buses
    - Multiple VL bus masters and bursting supported
  - NxPCI: High performance system logic chip for PCI & ISA standard buses
    - 33 MHz PCI Speed
    - Decoupled PCI and CPU buses
    - Multiple PCI bus masters and bursting supported

- Reference Motherboard Designs Available
  - NexGen design for maximum performance, lowest cost, highest quality
  - Baby AT form factor enables mainstream PCs
  - Allows reduced R&D expenditure for OEMs
  - Allows fast manufacturing ramp
# Pricing and Delivery

<table>
<thead>
<tr>
<th>Model</th>
<th>Price (1KU)</th>
<th>Availability</th>
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</thead>
<tbody>
<tr>
<td>Nx586-60</td>
<td>$460</td>
<td>Q2</td>
</tr>
<tr>
<td>Nx587-60</td>
<td>$128</td>
<td>Mid-'94</td>
</tr>
<tr>
<td>Nx586-66</td>
<td>$506</td>
<td>Q2</td>
</tr>
<tr>
<td>Nx587-66</td>
<td>$128</td>
<td>Mid '94</td>
</tr>
<tr>
<td>NxVL</td>
<td>$86</td>
<td>Now</td>
</tr>
<tr>
<td>NxPCI</td>
<td>$TBD</td>
<td>2nd Half, '94</td>
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</tbody>
</table>
## Basic PC System Cost

Nx586-60, 256KB L2 Cache, 8MB DRAM, 2 VL Slots, 6 ISA Slots

<table>
<thead>
<tr>
<th>Product</th>
<th>Make and Model</th>
<th>Manufacturer's Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor</td>
<td>NexGen Nx586-60</td>
<td>460.00</td>
</tr>
<tr>
<td>ChipSet</td>
<td>NexGen NxVL</td>
<td>86.00</td>
</tr>
<tr>
<td>Harddisk</td>
<td>Maxtor 7345AT, 340MB, 15mS</td>
<td>207.00</td>
</tr>
<tr>
<td>Monitor</td>
<td>Generic 14&quot; 1024x768 NI</td>
<td>203.00</td>
</tr>
<tr>
<td>Video</td>
<td>ET4000-W32 w/1MB VLB Video</td>
<td>98.50</td>
</tr>
<tr>
<td>DRAM</td>
<td>8MB</td>
<td>245.00</td>
</tr>
<tr>
<td>Cache</td>
<td>CMOS 256KB-15nS</td>
<td>32.00</td>
</tr>
<tr>
<td>MotherBoard</td>
<td>Basic</td>
<td>89.00</td>
</tr>
<tr>
<td>Desktop Case</td>
<td>Generic</td>
<td>30.00</td>
</tr>
<tr>
<td>Power Supply</td>
<td>Generic 200W</td>
<td>17.00</td>
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<tr>
<td>I/O Adapter</td>
<td>Generic and VLB</td>
<td>23.00</td>
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<tr>
<td>Keyboard</td>
<td>Mitsumi</td>
<td>14.00</td>
</tr>
<tr>
<td>Mouse</td>
<td>Generic Serial</td>
<td>5.00</td>
</tr>
<tr>
<td>3.5&quot; Floppy</td>
<td>Teac</td>
<td>28.00</td>
</tr>
<tr>
<td>Bundled Software</td>
<td>MS Windows 3.1, MSDOS6.2</td>
<td>30.00</td>
</tr>
</tbody>
</table>

| Total            | 1567.50                        |
| Gross Margin     | 21% 427.50 17% 327.50          |
| Sales Price      | 1995.00                        |

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NexGen™
Board and OEM Partners

Board Manufacturers
- Relationships established with motherboard companies
- 1992 Volume: 5,000,000
- 10 Companies have motherboards built and running; ready for orders
- Set up for quick turnaround production

OEM Manufacturers
- Currently in evaluation at several dozen PC manufacturers
- Worldwide Scope
Future Directions

- NexGen 's RISC86™ Microarchitecture Easily Extensible
- Next Generation Product (Nx686™ microprocessor)
  - In development for more than 2 years
  - Performance goal: 2-4X Nx586

Prepared to compete for the long run
Summary

- Well financed and managed company
- Leading edge technology today and tomorrow
- NexGen Nx586 Family - 5th generation performance for mainstream users
- Strategic and influential partners
- Well positioned for future growth