

# NOTEBOOK

## .....386/486 Single Chip Notebook.....

**T**he OPTi SCNB 82C463 or 82C263 is the optimum single chip high performance solutions for the low power, portable computer market.

They are designed to provide desktop type performance for a multitude of processors including 486SX, 486DX, 486DXZ, 486DX2, 486DLC and 386DX. Top of the line performance level allows outstanding bit-mapped windowing environments.

The 82C463 is a single chip solution for the 32 bit 486 market while 82C263 is a single chip solution for the 16 bit 486 market.

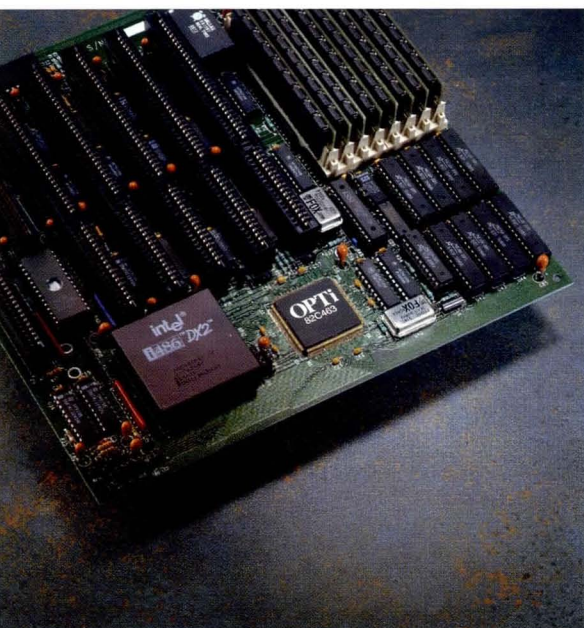
The SCNB consists of a single chip VLSI which includes: CPU, block mode DRAM, AT bus, VESA Local bus, and a state-of-the-art power management controller.

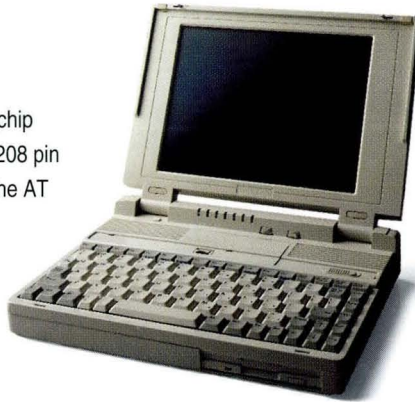
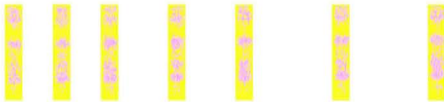
The OPTi power management options allows the OEMs maximum power savings in extremely flexible and effective power management options including SMI and sequencer approaches. The SCNB is the most advanced chip of its type in the market.

The OPTi chipset craftsmen, with their proven track record in high performance desktop AT chipsets are proud to offer the SCNB. A continuation of the OPTi tradition of excellence in PC chipsets.

### Features/Benefits

- Single chip 16/20/25//33 MHz 486SX, 486DX, 486DXZ, 486DLC, 386DX support
  - 6 TTLs no PALs, separate RTC
  - Chip selects for standard peripherals
- Premium power management unit
  - 3v or 5v operation
  - Static mode processor support
  - Power management sequencer for 486/non SMI designs
  - VESA local bus support
  - Variable CPU frequencies
  - 3 operating modes: Normal, Sleep, Suspend
  - RAS before CAS and slow refresh DRAM controller
- Full APM support
  - CPU idle back to full speed with no time
  - Modular CPU clocking to save more power
  - Extra software utility timer
- OS and application independent power management (no device drivers needed)
- 0 Volt suspend
- Supports 2-1-1 burst read memory cycles
  - 4 Banks of DRAM up to 32 MB
  - Slow and self refresh DRAM support
  - Hidden refresh
  - CPU Bus local device support
  - Static quiet AT bus when not AT cycle
- 4 user definable I/O pins
- Very low power, high speed, static 0.8µ CMOS technology

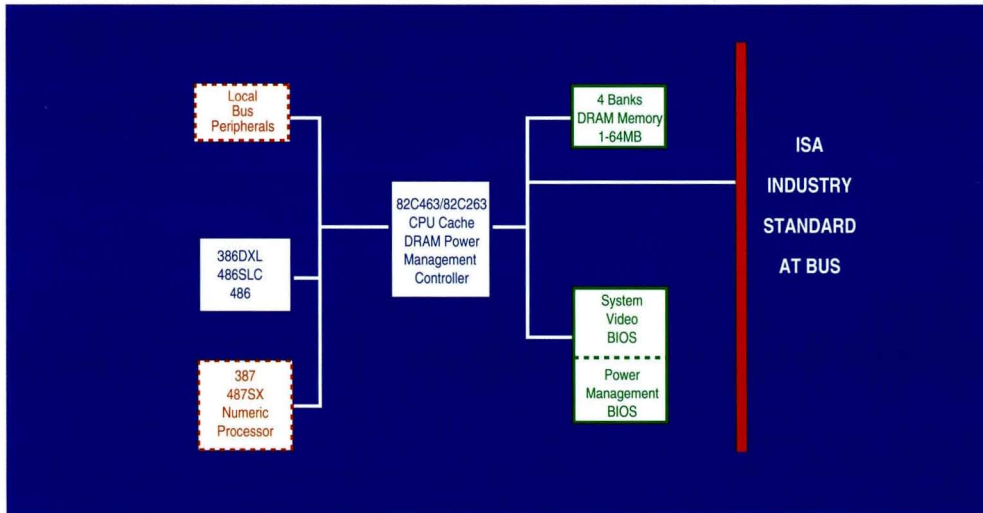




The OPTi 82C463/82C263 SCNB is a highly integrated single chip notebook device for the high-end 486 notebook market. The 208 pin QFP device provides a real single chip solution including all the AT (82C206 included) and power management functionality. The SCNB supports all the different versions of SMI. The SCNB supports up to 33 MHz for both 3 and 5 volt operation with the power management implementation flexibility of SMI and sequencer. The SCNB offers OEMs the tool for a superior product in the notebook market.

Vital Statistics	486SCNB	486SCNB	486SCNB
Frequency	20MHz	25MHz	33MHz
VLSI +TTL	1+16	1+16	1+16
PALs	0	0	0
Paging, 1/2/3/4 Banks	1-32MHB	1-32MB	1-32MB
Synchronous AT Bus Clock	8MHz	8.33 MHz	8.25 MHz
DRAM Speed	100ns	80ns	80ns
Video/System BIOS shadow/cache	Yes	Yes	Yes
Landmark Speed 1.14	90.8	114.1	151.9
Power Meter v1.2 MIPS	8.38	11.23	14.8
Byte CPU Index v1.3	5.29	7.49	9.6

**OPTi SCNB:**  
The preferred way to high performance low power notebooks.



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