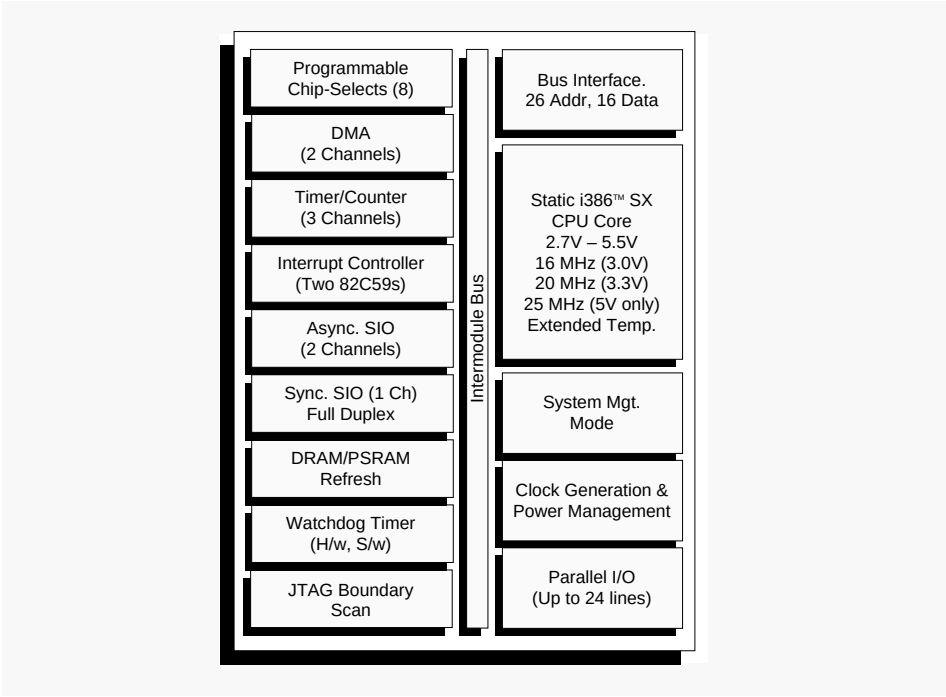
Intel386™ EX Embedded Processor

If you are interested in simplifying your embedded design or have already discovered the benefits of an 80x86 embedded solution, look no further than the Intel386™ EX processor solution. The Intel386 EX processor is a 32-bit 80386 core integrated with several embedded peripherals. Integration can provide you with a cost effective and simplified design. The flexibility of the Intel386 EX processor can provide both embedded PC and traditional embedded features to benefit your design.



The Embedded PC Processor
System designers have long understood the benefits of PC compatibility in embedded designs. The Intel386 EX processor enables these benefits in your design by simplifying your hardware and software design, while reducing your time to market.

The Intel386 EX processor is compatible with DOS and standard graphical windowing operating environments, as well as many popular embedded real-time operating systems. This can save you the time and effort of developing your own proprietary operating system. Also, you can take advantage of the availability of many off-the-shelf applications, high-level languages, BIOS routines, and software drivers that are now being used in traditional embedded applications.

Additionally, the ability to use the PC for software debugging and the wide selection of quality development tools allows for simplified, inexpensive, yet effective software development. This can give a head-start on software development, often before the hardware is even completed.

186 Upgrade Processor
If your 186 embedded design requires either more addressibility or higher performance, the Intel386 EX processor is your upgrade choice. The EX provides 26 address bits for a total of 64 GBytes. Also, given the same clock rate, the Intel386 EX processor performs up to 3 times the performance over a 186-based processor. Since the EX has an 80386 core, it is code compatible with 186 processors, making it a logical upgrade processor to run your existing software. Additionally, software can be modified to take advantage of the 80386 features, including memory protection and multitasking.

The Intel386 EX processor also provides power management features, system management mode (SMM), and low voltage operation for power-sensitive applications.

Integration of the Intel386 EX processor can also provide you with a simplified, compact design that can also lessen your burden on support chips that may become hard to find.

Embedded Commitment
The Intel386 EX processor will be around for a very long time and is only one of the Intel-architecture embedded processors. Intel, with the rest of the industry, has already made a strong commitment to the 8086 architecture. Intel has carried this legacy to the EMBEDDED processors.

Development Tools
Many development tools have been adopted and developed for the embedded environment. These include popular 16 and 32-bit compilers, operating systems, BIOSs, debuggers, low-cost in-circuit emulators (ICE), logic analyzers, evaluation platforms, etc.

AVAILABILITY:

Ordering Code	Package	Performance Range
KU80386EXSA25	132-lead PQFP	3V @ 16 MHz, 3.3V @ 20 MHz, 5V @ 25 MHz
FA80386EXSA25	144-lead TQFP	3V @ 16 MHz, 3.3V @ 20 MHz, 5V @ 25 MHz

Also available in extended temperature range

CONTACT:
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