

Product Matrix

Microprocessor Development Tools

Highlights

- Deeply-featured full-scale emulators
- Exciting new CodeTEST™ embedded software verification tools
- Patented CodeTAP® low-cost emulators
- Innovative CodeTAP-XA (enhanced architecture) emulators
- New-technology CodeICE™ processor-targeted emulators
- Intuitive, work-saving debugger/interfaces
- Revolutionary NetROM™ communications gateway for embedded development
- Full range of compatible code development tools



Applied
Microsystems
Corporation

It's All We Do

Applied Microsystems Corporation is in one business and one business only. For more than sixteen years, Applied has been designing and building tools to help embedded developers get products to market more quickly and easily.

So You Can Do it Better

Our experience and our close relationships with major microprocessor manufacturers let us bring you tools that help unlock all the power of today's complex devices.

Applied offers a range of tools that fit easily in your environment, from full-scale emulators with highly sophisticated functions to the affordable CodeTAP® series of patented, compact emulators. Our innovative new CodeICE™ emulators feature a cost-and-work-saving design with high-performance features tuned for individual processors. CodeTEST™ software verification tools represent a whole new category of performance and quality improvement capabilities for both software developers and testers. Add our efficient, customized debugger interfaces and extensive software toolchain support, and you have a single source for the embedded development tools that help you get the job done right the first time.

And because you can never have too much help when you're facing a deadline, our Application Engineering Group provides a support gateway to Applied's entire resource pool. With tools and support like this, you can't help but build better products.

*Supporting embedded system developers
for over sixteen years.*



*For More Information:
Call 1-800-426-3925; E-Mail info@amc.com;
Browse <http://www.amc.com>*

| Processor | Emulator | CPU Packages | Clock Speed | Mask/Step Revision | Host Platform | RTOS Support | Debugger | Compiler | Simulator | ROM Monitor |
|-----------|----------|--------------|-------------|--------------------|---------------|--------------|----------|----------|-----------|-------------|
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Intel

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|---------------------------------------|-----------------------------------|--|---|-----------------|-----------------------|---|------------|---|-----|-------------------------------|
| 80960 HA, HD, HT | CodeICE,™ CodeTAP® | PGA and PQFP with adapter | 75 MHz | Contact Factory | Sun4, PC, HP 9000/700 | VxWorks,® pSOS® | MWX-ICE | Intel, GNU, MRI, MRI C++ | MRI | MON960 (GNU960, Intel CTOOLS) |
| 80L960 JA 80L960 JF, JA, JF, JD | CodeICE | PGA and PQFP with adapter | 50 MHz | Contact Factory | Sun4, PC, HP 9000/700 | VxWorks® pSOS® | MWX-ICE | Intel, GNU, MRI, MRI C++ | MRI | MON960 (GNU960, Intel CTOOLS) |
| 80960 CA | EL 3200M, CodeTAP | PGA and PQFP with adapter | 33 MHz | Contact factory | Sun4, PC, HP 9000/700 | | MWX-ICE | Intel, GNU, MRI, MRI C++ | MRI | NINDY (MRI, GNU) |
| 80960 CF | EL 3200M, CodeTAP | PGA and PQFP with adapter | 40 MHz | Contact factory | Sun4, PC, HP 9000/700 | | MWX-ICE | Intel, GNU, MRI, MRI C++ | MRI | NINDY (MRI, GNU) |
| 80386 EX | CodeTAP-386EX | Clip-on 132 pin PQFP. Solder-down 132-pin PQFP & 144-pin TQFP | 25 MHz | Contact factory | PC | IRMX | Soft-Scope | Metaware, Borland, Intel, Watcom, Microsoft | | CSi-Mon |
| 80386 DX, 80386 DXL, 80386 SX | CodeTAP | PGA, PQFP, 100-pin AMP, or clip-on (SX) (180 footprints available) | 40 MHz | Contact factory | PC | IRMX | Soft-Scope | Metaware, Borland, Intel, Watcom, Microsoft | | CSi-Mon |
| 80C18x, 80C18x XL, 80L18x XL | EL1600, CodeTAP-XA, CodeTAP | 68-pin PLCC, 68-pin PGA, 80-pin PQFP, 80-pin SQFP, 80-pin TQFP | 10, 12.5, 16, 20 & 25MHz 5volt 13 MHz 3volt | Current | PC, OS/2 | Accelerated Technology, Datalight, Emb Sys Prod, Ready. AMX | Paradigm | Microsoft Borland, Intel, PLM, MRI | MRI | Paradigm |
| 80C18x EA, 80L18x EA | EL1600, CodeTAP-XA, CodeTAP | 68-pin PLCC, 68-pin PGA, 80-pin PQFP, 80-pin SQFP, 80-pin TQFP | 8, 13, 16, 20 & 25MHz 5volt 13MHz 3volt | Current | PC, OS/2 | Accelerated Technology, Datalight, Emb Sys Prod, Ready, AMX | Paradigm | Microsoft Borland, Intel, PLM, MRI | MRI | Paradigm |
| 80C18x EB, 80L18x EB | EL1600, CodeTAP-XA, CodeTAP | 84-pin PLCC, 84-pin PGA, 80-pin PQFP, 80-pin TQFP | 8, 13, 16, 20 & 25MHz 5volt 13MHz 3volt | Current | PC, OS/2 | Accelerated Technology, Datalight, Emb Sys Prod, Ready. AMX | Paradigm | Microsoft Borland, Intel, PLM, MRI | MRI | Paradigm |
| 80C18x EC, 80L18x EC | EL1600, CodeTAP-XA, CodeTAP | 100-pin PQFP (JEDEC and EIAJ) 100-pin AMP 100-pin SQFP 100-pin TQFP | 13, 16, 20 & 25 MHz 5volt 12.5MHz 3volt | Current | PC, OS/2 | Accelerated Technology, Datalight, Emb Sys Prod Ready, AMX | Paradigm | Microsoft Borland, Intel, PLM, MRI | MRI | Paradigm |

* Call for availability.

| Processor | Emulator | CPU Packages | Clock Speed | Mask/Step Revision | Host Platform | RTOS Support | Debugger | Compiler | Simulator | ROM Monitor |
|--|-------------|---|--------------------------------------|--|------------------------|--------------------|----------|---|-----------|-------------|
| Motorola | | | | | | | | | | |
| 68000, 68EC000, 68HC000 | EL 1600 | PGA, PLCC, PGA | 16 MHz | C91E 5C71T 2B89N | Sun4, PC | pSOS | MWX-ICE | MRI, GNU, Intermetrics, DIAB, SDS, Oasys / Greenhills | MRI | MRI |
| 68020; 68EC020 | CodeICE | PGA, PQFP | 33 MHz 25 MHz | E30G C10H | Sun4, PC, HP 9000* | VxWorks, pSOS | MWX-ICE | MRI, GNU, Intermetrics, DIAB, SDS, Oasys / Greenhills | MRI | MRI |
| 68030; 68EC030 | CodeICE | PGA, CQFP | 40 MHz | D66C | Sun4, PC, HP 9000* | VxWorks, pSOS | MWX-ICE | MRI, GNU, Intermetrics, DIAB, SDS, Oasys / Greenhills | MRI | MRI |
| 68040; 68EC040; 68LC040; 68040V | CodeICE | PGA, CQFP PGA, CQFP PGA, CQFP CQFP, PQFP | 40 MHz 33 MHz 33 MHz 33 MHz | 2E31F, 2E23G, 2E23G, 5D33T, 5D33T | Sun4, PC, HP 9000* | VxWorks, pSOS | MWX-ICE | MRI, GNU, Intermetrics, DIAB, SDS, Oasys / Greenhills | MRI | MRI |
| 68060, 68EC060, 68LC060 | CodeICE | PGA, CQFP | 50 MHz, 66 MHz* | 1F43G | Sun4, PC,* HP 9000* | VxWorks,* pSOS* | MWX-ICE | MRI, GNU, Intermetrics, DIAB, SDS, Oasys / Greenhills | MRI | MRI |
| 68302, 68LC302 | EL 1600 | PGA, PQFP, CQFP, TQFP | 25 MHz | 1C65T | Sun4, PC, HP9000* | pSOS | MWX-ICE | MRI, GNU, Intermetrics, DIAB, SDS, Oasys / Greenhills | MRI | MRI |
| 68330; 68340 | EL 3200M | PQFP, PGA, CQFP | 25 MHz; 16.67 MHz (340) | 1D81H 2E16G | Sun4, PC | pSOS | MWX-ICE | MRI, GNU, Intermetrics, DIAB, SDS, Oasys / Greenhills | MRI | MRI |
| 68331 68332A 68332G | CodeTAP-XA | PQFP | 20 MHz | Current | Sun 4, PC | pSOS | MWX-ICE | MRI, GNU, Intermetrics, DIAB, SDS, Oasys / Greenhills | MRI | MRI |
| 68360, 68EN360 68MH360 | EL 3200M | PGA, CQFP | 25 MHz 33 MHz | | Sun 4, PC, HP 9000* | pSOS | MWX-ICE | MRI, GNU, Intermetrics, DIAB, SDS, Oasys / Greenhills | MRI | MRI |
| ColdFire MCF5102 | CodeICE | TQFP | 16 MHz 20 MHz 25 MHz | 1F94E | Sun4, PC, HP9000* | VxWorks, pSOS | MWX-ICE | MRI, GNU, Intermetrics, DIAB, SDS, Oasys/ Greenhills | | |
| CPU32 (68331/332/ 330/340/341/ 349/360) | CodeTAP-BDM | 8 & 10-pin BERG, clip-on for 332 & 340 PQFP | 33 MHz | | PC, SPARC, HP9000* | pSOS | MWX-ICE | MRI, GNU, Intermetrics, DIAB, SDS, Oasys/ Greenhills | MRI | MRI |
| Toshiba 301, 303, 305 | EL 1600 | PGA | 16 MHz | | Sun4, PC | | MWX-ICE | MRI, GNU, Intermetrics, DIAB, SDS, Oasys/ Greenhills | MRI | MRI |

* Call for availability.

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|-----------|----------|--------------|-------------|--------------------|---------------|--------------|----------|----------|-----------|-------------|
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AMD

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|----------------------------|-----------------------------|---|--------------------------------|-----------------|---------|---|------------|---|-----|----------|
| 80386DX, 80386DXL, 80386SX | CodeTAP | PGA, PQFP, 100-pin AMP, or clip-on (SX) (180° footprints available) | 40 MHz | Contact factory | PC | IRMX | Soft-Scope | Metaware, Borland, Intel, Watcom, Microsoft | | CSi-Mon |
| 80C18x, 80C18xXL, 80L18xXL | EL1600, CodeTAP-XA, CodeTAP | 68-pin PLCC, 68-pin PGA, 80-pin PQFP, 80-pin SQFP, 80-pin TQFP | 10, 12.5, 16, 20 & 25MHz 5volt | Current | PC OS/2 | Accelerated Technology, Datalight, Emb Sys Prod, Ready. AMX | Paradigm | Microsoft, Borland, Intel, PLM, MRI | MRI | Paradigm |

| Module | Description | Host Platform | Processor Support |
|--------|-------------|---------------|-------------------|
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CodeTEST™

Embedded Software Verification Tools

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|-------------|---|-------------------------|---|
| Performance | CodeTEST/Performance provides in-circuit software timing measurements (function/task execution times, min/max/ave and cumulative execution times), graphical displays and function Call-Pairs to identify thrashing. Measurements are comprehensive and live, not sampled or statistical. | SUN, HP and Windows 95° | Call for latest processor support information |
| Coverage | CodeTEST/Coverage provides interactive displays showing exactly what code was executed during testing. Multiple display views show code coverage at program summary, function, source and trend levels. | SUN, HP and Windows 95° | Call for latest processor support information |
| Memory | CodeTEST/Memory dynamically tracks memory allocation instructions, displays live allocation status (identify memory leaks in progress), and detects discrete memory pointer errors. | SUN, HP and Windows 95° | Call for latest processor support information |
| Trace | CodeTEST/Trace provides a source level trace tool which displays execution history at High-Level, Control-Flow and Source level views. CodeTEST/Trace provides extended triggering capabilities. | SUN, HP and Windows 95° | Call for latest processor support information |

°Call for availability

| Processors | Operating Systems | Compilers | Debuggers |
|------------|-------------------|-----------|-----------|
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NetROM

Communications Gateway

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|--|--|---|---|
| PowerPC, 680x0 Family, 6830x, CPU32, R3000, SPARClike, i960 Family, 29K Family | pSOS+, VxWorks (Tornado), VRTX (VRTXsa, Spectra) | Green Hills, GNU, Software Development Systems, Diab Data, Microtec Research, Intermetrics, BSO | Green Hills, gdb/Vxgdb, SDS, MRI, Intermetrics, BSO |
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Contact Applied for details of particular configurations or for components not listed



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