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EWARM - P7	
MCUs/Chips	<p><b>ARM:</b>            ARM7: ARM7TDMI®, ARM7TDMI-S™ and ARM720T™            ARM9: ARM9TDMI®, ARM920T™, ARM922T™ and ARM940T™            ARM9E: ARM946E-S™ and ARM966E-S™            ARM10: ARM1020E and ARM1022E  <b>Intel</b>® XScale™.</p> <p><b>Analog Devices:</b> ADuC7020, ADuC7021, ADuC7022, ADuC7024, ADuC7025, ADuC7026, ADuC7027</p> <p><b>Atmel:</b> AT91F40816, AT91FR40162, AT91FR4042, AT91FR4081, AT91M40400, AT91M40800, AT91M40807, AT91M42800, AT91M55800, AT91M63200, AT91R40008, AT91R40807, AT91RM9200, AT91SAM7S64, AT91X40</p> <p><b>Cirrus Logic:</b> EP73xx (EP7309, EP7311, EP7312), EW9301, EP9312, EP9315</p> <p><b>Intel:</b> XScale™ IOP321, PXA210, PXA250, PXA255</p> <p><b>Freescale/Motorola:</b> Dragonball MC9328MX1, MAC7100, MAC7101, MAC7111, MAC7112, MAC7121, MAC7122, MAC7131, MAC7141, MAC7142</p> <p><b>OKI:</b> ML670100, ML671000, ML674000, ML674001, ML675001, ML67Q2300, ML67Q4002, ML67Q4003, ML67Q5002, ML67Q5003</p> <p><b>Philips:</b> LPC210x (LPC2104, LPC2105, LPC2106), LPC2114, LPC2119, LPC2124, LPC2129, LPC2130, LPC2194, LPC2212, LPC2214, LPC2292, LPC2294</p> <p><b>Samsung:</b> S3C3400, S3C44A0A, S3C44B0X, S3C4510B, S3C4530A, S3C4610, S3C4640 , S3C4650, S3C380D</p> <p><b>Sharp:</b> LH75400, LH75401, LH75410, LH75411, LH77790B, LH79520, LH7A400, LH7A404</p> <p><b>The following chips will be supported in V4.20A:</b>            Atmel SAM7A1, SAM7A2, SAM7A3, SAM7S32, SAM7S128, SAM9261 and AT91RM3400.            Philips 2138.            Cirrus EP9303, EP9304, EP9305, EP9306, EP9307, EP9309, EP9310, EP9311.            ST720RBQ6, ST710FZ1T6, ST710FR1T6, ST711FR1T6, ST712FR1T6, ST710FZ2T6, ST711FR2T6, STR712FR2T6.            Texas TMS470R1VF688, TMS470R1VF689.</p>
Hardware debugging	<p>Flash loaders - Flash loaders for the following devices are included in the installation</p> <ul style="list-style-type: none"> <li>- <b>Analog Devices</b> ADuC7020, ADuC7021, ADuC7022, ADuC7024, ADuC7025, ADuC7026, ADuC7027</li> <li>- <b>Philips</b> LPC2104, LPC2105, LPC2106, LPC2114, LPC2124, LPC2212, LPC2214, LPC2119, LPC2129, LPC2194, LPC2292, LPC2294</li> </ul> <p>C-SPY JTAG support:</p> <ul style="list-style-type: none"> <li>- <b>ARM Multi-Ice and other RDI-based JTAG interfaces:</b> <ul style="list-style-type: none"> <li>• <b>EPI</b> MAJIC, MAJIC-MX, MAJIC-plus,</li> <li>• <b>Abatron</b> BDI1000/BDI2000</li> <li>• <b>Aiji</b> OPENice32-A900</li> <li>• <b>Ashling</b> OPELLA</li> <li>• <b>Signum Systems</b> JTAGjet-ARM</li> </ul> </li> </ul>

	<p>(The C-SPY debugger now supports the ARM ETM (Embedded Trace Macrocell) trace when using the EPI Majic JTAG interface.)</p> <p>- <b>Macraigor mpDemon, Raven, Wiggler and USBdemon</b></p> <ul style="list-style-type: none"> <li>• <b>Atmel</b> AT91 EB40 , EB42, EB55 and EB63 Eval boards (with preflashed Angel Monitor, RAM download only)</li> <li>• <b>Multiple targets on the same JTAG chain</b></li> <li>• <b>ARM Angel</b></li> <li>• <b>EPI JEENI JTAG emulator</b></li> <li>• <b>IAR</b> J-Link USB-driven JTAG interface for ARM (<b>JLINK-ARM</b>)</li> </ul> <p><b>IAR JLINK-ARM</b> is a small USB-to-JTAG conversion box designed for ARM cores. It connects via USB to the PC host running Windows. J-Link integrates seamlessly into the IAR Embedded Workbench for ARM and is fully plug-and-play compatible:</p> <ul style="list-style-type: none"> <li>• Supports ARM7 and ARM9, including Thumb mode</li> <li>• Download speed up to 120kb/s</li> <li>• No power supply required, powered through USB</li> <li>• Max. JTAG speed 8 MHZ</li> <li>• Auto speed recognition</li> <li>• All JTAG signals can be monitored, target voltage can be measured</li> <li>• 20-pin standard JTAG connector, optional 14-pin adapter</li> <li>• USB and 20-pin flat cable included)</li> </ul> <p>Generic flash downloader framework</p> <ul style="list-style-type: none"> <li>- Flash loaders can be loaded by the C-SPY debugger to handle code download to flash.</li> <li>- A set of flash loaders for various chips is provided with the EWARM distribution.</li> <li>- Flash loader API, documentation and an example loader in source form is provided to make it easy for developers to implement flash algorithms.</li> </ul> <p>(Due to the vast amount of flash solutions in the ARM marketplace it is likely that more flash loaders will be provided by chip manufacturers, third party vendors and end users.)</p> <p><b>IAR KickStart Development Kit for Philips LPC2106</b> includes</p> <ol style="list-style-type: none"> <li>1. The IAR KickStart Card for Philips LPC2106 (ARM7) board,</li> <li>2. CD containing EWARM 32K Kickstart version, MakeApp for LP210x full version and visualSTATE 20-state demo version.</li> <li>3. IAR J-Link JTAG debugger.</li> </ol> <p>The KickStart Card has the following features:</p> <ul style="list-style-type: none"> <li>• Two serial ports</li> <li>• Reset button</li> <li>• In-system programming (ISP) button</li> <li>• Two user-defined buttons</li> <li>• 16 fully configurable LEDs</li> <li>• Power-on LED</li> <li>• 20-pin JTAG interface connector</li> <li>• Breakout headers for all pins (suitable for mounting daughter boards)</li> <li>• 20x20 array of plated holes for prototyping</li> </ul>
<p>RTOS</p>	<p>Plug-in modules from IAR</p> <ul style="list-style-type: none"> <li>- <b>Express Logic: ThreadX RTOS</b> (included in EW)</li> <li>- <b>CMX CMX-RTX RTOS</b> (included in EW)</li> <li>- <b>CMX CMX-Tiny+RTOS</b> (included in EW)</li> </ul> <p>Plug-in modules from partners:</p> <ul style="list-style-type: none"> <li>- <b>Micrium µC/OS-II</b></li> <li>- <b>Unicoi Systems: Fusion RTOS</b></li> <li>- <b>Quadros Systems: RTX Quadros RTOS,</b></li> </ul> <p>Allows you to display the internal data structures in a convenient series of Windows integrated with the C SPY Debugger within the IAR Embedded Workbench. This provides you with information about each of the active tasks in the target application, about each semaphore, mutex, mailbox, queue and event flag group along with a list of all the tasks waiting on these kernel objects, and more.</p>

	Compatible with <a href="#">Segger Microcontroller Systeme GmbH: embOS</a>
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### EWAVR - P6 (P7 from V4.10)

MCUs/Chips	<p><b>Atmel:</b> AVR Classic, Mega and FPSLIC families, including devices with the enhanced core:  ATtiny13, ATtiny22L, ATtiny26, ATtiny26L, ATtiny2313, AT90S2313-4, AT90S2313-10, AT90S2323, AT90LS2323, AT90S2333, AT90LS2333, AT90S2343, AT90LS2343, AT90S4414-4, AT90S4414-8, AT90S4433, AT90LS4433, AT90S4434, AT90LS4434, AT90S8515-4, AT90S8515-8, AT90C8534, AT90S8535, AT90LS8535</p> <p>ATmega8, ATmega8L, ATmega16, ATmega16L, ATmega32, ATmega32L, ATmega48, ATmega48V, ATmega64, ATmega64L, ATmega88, ATmega88V, ATmega103, ATmega103L, ATmega128, ATmega128L, ATmega161, ATmega161L, ATmega162, ATmega162L, ATmega162V, ATmega163, ATmega163L, ATmega165, ATmega168, ATmega168V, ATmega169L, ATmega169V, ATmega2560, ATmega2561, ATmega323, ATmega323L, ATmega325, ATmega3250, ATmega329, ATmega3290, ATmega645, ATmega6450, ATmega649, ATmega6490, ATmega8515, ATmega8515L, ATmega8535, ATmega8535L,</p> <p>AT43USB320A, AT43USB325, AT43USB326, AT43USB351M, AT43USB353M, AT43USB355, AT90CAN128, AT86RF401</p> <p>AT94K05AL, AT94K10AL, AT94K40AL, AT94S05AL, AT94S10AL, AT94S40AL.</p> <p><b>USB chip derivatives support in V4.10A</b></p> <p>The following tiny chips are supported only in assembler:  ATtiny11L, ATtiny11, ATtiny12V, ATtiny12L, ATtiny12, ATtiny15L, ATtiny28L, ATtiny28V</p>
Hardware debugging	<p><b>Atmel</b></p> <ul style="list-style-type: none"> <li>- ICE 200 in-circuit emulator</li> <li>- JTAG ICE</li> <li>- STK500 (m32), STK501 (m128)</li> <li>- <b>MK2 support in V4.10A</b></li> </ul> <p>C-SPY interface included in full version. (Projects can be run without the AVR Studio!)</p> <ul style="list-style-type: none"> <li>- Card Development Kit for AT90SCC</li> </ul> <p>Support by C-SPY ROM-monitor (CSAVR-CCR, order separately). Atmel ES2 provides the monitor program and hardware.</p> <ul style="list-style-type: none"> <li>- AVR Studio 4.x</li> </ul> <p>IAR output format (ubrof8) fully compatible with AVR Studio (fully support Atmel ICE via the Atmel debugger interface)</p>
RTOS	<p>General support for</p> <p><b>CMX:</b> CMX-RTX RTOS</p> <p><b>Micrium:</b> <math>\mu</math>C/OS-II</p> <p><b>Segger:</b> embOS</p>

### EWMAXQ - P6

MCUs/Chips	<b>Dallas:</b> MAXIM MAXQ20
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Hardware debugging	<b>Dallas</b> emulator and JTAG <b>MAXQ2000-K00</b>
RTOS	

### EW8051 -P6 (P7 from V7.10)

MCUs/Chips*	<p><b>Generic:</b> plain, extended-51, tiny, 8051 and 8052 The configuration files are ready for the following chip and can be easily modified to suit most 8051 chips!</p> <p><b>Analog Devices:</b> ADuC812, ADuC814, ADuC824, ADuC836, ADuC841, Adu842, ADuC843</p> <p><b>Atmel:</b> AT80C5112,AT80C51SND1C,AT83C5103,AT83C5111,AT83C5112,AT83C5122,AT83C5123,AT83C5132,AT83C51SND1,AT83EC5122,AT83EC5123,AT83SND1C,AT85C5122,AT85EC5122,AT87C5103,AT87C5111,AT87C5112,AT87F51RC,AT87F55WD,AT89C2051  AT89C2051x2,AT89C4051,AT89C51,AT89C5122,AT89C5131,AT89C5132,AT89C51CC03,AT89C51ED2,AT89C51IC2,AT89C51ID2  AT89C51RB2,AT89C51RC,AT89C51RC2,AT89C51RD2,AT89C51SND1,AT89C51SND1C,AT89C52,AT89C55,AT89C55WD,AT89LS51,AT89LS52  AT89LS53,AT89LS53,AT89LS8252,AT89LV51,AT89LV52,AT89LV55,AT89S51,AT89S52,AT89S53,AT89S8252,T80C5112,T83C5101  T83C5102,T83C5121,T85C5121,T87C5101,T87C5111, T87C5112, T89C5115,T89C5121,T89C51AC2,T89C51AC2,T89C51CC01  T89C51CC02,TS80C51RA2,TS80C51RD2,TS83C51RB2, TS83C51RC2,TS83C51RD2,TS87C51RB2, TS87C51RC2,TS87C51RD2</p> <p><b>Silicon Laboratories (Cygnal):</b> C8051F000, C8051F001, C8051F002, C8051F005, C8051F006, C8051F007 C8051F010, C8051F011, C8051F012, C8051F015, C8051F016, C8051F017 C8051F020, C8051F021, C8051F022, C8051F023 C8051F040, C8051F041, C8051F042, C8051F043  C8051F120, C8051F121, C8051F122, C8051F123, C8051F124, C8051F125, C8051F126, C8051F127  C8051F206, C8051F220, C8051F221, C8051F226, C8051F230, C8051F231, C8051F236  C8051F300, C8051F301, C8051F302, C8051F303, C8051F304, C8051F305, C8051F310, C8051F311, C8051F320, C8051F321</p> <p><b>Cypress:</b> CY7C64601, CY7C64603, CY7C64613</p> <p><b>Dallas:</b> DS80C310, DS80C320, DS80C323, DS80C390, DS80C400, DS83C520, DS83C530, DS87C520,DS87C530,DS87C550, DS89420, DS89C430, DS89C440, DS89C450</p> <p><b>Infineon:</b> C501, C503, C504, C505, C505c, C508, C515-L, C517A-L, C764, C868-1RG, C868-1RR, C868-1SG, C868-1SR,</p>
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	<p>SAB80C515, SAB80C517, SAB80C51A, SAB80C537, SAB83C51A, SAF-C868-1RG, SAF-C868-1RR, SAF-C868-1SG BA, SAF-C868-1SR BA, SAF-C868P-1SG BA, SAF-C868P-1SR BA, SAK-C868-1SG BA, SAK-C868-1SR BA, SAK-C868P-1SG BA, SAK-C868P-1SR BA</p> <p><b>Philips:</b> P80C51, P80C52</p> <p>P87C51, P87C51MB2, P87C51MC2, P87C52, P87LPC760, P87LPC762</p> <p>P89C660, P89C662, P89C664, P89C668</p> <p>P89LPC901, P89LPC902, P89LPC903, P89LPC906, P89LPC907, P89LPC908, P89LPC912, P89LPC913, P89LPC914</p> <p>P89LPC920, P89LPC921, P89LPC922, P89LPC933, P89LPC934, P89LPC935</p> <p><b>STMicroelectronics:</b></p> <p>uPSD3212C, uPSD3212C-40T6, uPSD3212C-40U6, uPSD3212CV, uPSD3212CV-24T6, uPSD3212CV-24U6, uPSD3233B, uPSD3233BV</p> <p>uPSD3234A, uPSD3234BV, uPSD3253B, uPSD3253BV, uPSD3254A, uPSD3254BV, uPSD3312D, uPSD3312D-40T6, uPSD3312DV</p> <p>uPSD3312DV-40T6, uPSD3333D, uPSD3333D-40T6, uPSD3333D-40U6, uPSD3333DV, uPSD3333DV-40T6, uPSD3333DV-40U6</p> <p>uPSD3334D, uPSD3334D-40U6, uPSD3334DV, uPSD3334DV-40U6, uPSD3354D, uPSD3354D-40T6, uPSD3354D-40U6, uPSD3354DV, uPSD3354DV-40T6, uPSD3354DV-40U6</p> <p><b>Texas:</b> MSC1210Y2, MSC1210Y3, MSC1210Y4, MSC1210Y5, MSC1211Y2, MSC1211Y3, MSC1211Y4, MSC1211Y5, MSC1212Y2, MSC1212Y3, MSC1212Y4, MSC1212Y5</p> <p><b>Winbond:</b> W77C32, W77E516, W77E532, W77E58, W77IC32, W77IE58, W77L32, W77LE516, W77LE532, W77LE58, W78C32B, W78C438, W78C51</p> <p>W78C52, W78C54, W78C801, W78E365, W78E51, W78E516, W78E51RD2, W78E52, W78E54, W78E58B, W78E62, W78E65, W78E812</p> <p>W78E858, W78IE51, W78IE54, W78L32, W78L51, W78L52, W78L54, W78L801, W78LE51, W78LE516, W78LE52, W78LE54, W78LE58, W78LE812</p>
Hardware debugging	<p>C-SPY Rom-monitor support for <b>Dallas</b> TINI (Tiny InterNet Interfaces) board DS80C400</p> <p>C-SPY JTAG support for <b>Silicon Laboratories (Cygna)</b> All C8051Fxxx target boards and etc.</p>
RTOS	<p>General support for <b>Segger:</b> embOS</p>

\* Many new chip support from V6.11A

**EWx96 - P5**

MCUs/Chips

**Intel**

	80C196KB, KC, KD, KQ, KR, KT, MC, MD, MH, JQ, JR, NT, NU, NP, CA, 80C296SA
Hardware debugging	C-SPY Rom-monitor (CSx96-R) support for <a href="#">Intel</a> 's 196/296 Evaluation boards with RISM only. The RISM ROM monitor source code is available from Intel.
RTOS	

EWPIC - P5	
MCUs/Chips	<p><b>Microchip:</b>            PIC16Cxxx &amp; PIC17Cxxx (all 14 &amp; 16 bit cores):            12C671, 12C672, 12F629, 12F675, 16C432, 16C433, 16C554, 16C558, 16C61, 16C620,            16C620A, 16C621, 16C621A, 16C622, 16C622A, 16C62A, 16C63, 16C641, 16C642,            16C64A, 16C65A, 16C66, 16C661, 16C662, 16C67, 16C71, 16C710, 16C711, 16C712,            16C715, 16C716, 16C717, 16C72, 16C73A, 16C74A, 16C745, 16C76, 16C765, 16C77,            16C770, 16C771, 16C773, 16C774, 16C781, 16C782, 16C84, 16C923, 16C924, 16C925,            16C926, 16F627, 16F628, 16F630, 16F676, 16F684, 16F688, 16F716, 16F72, 16F73, 16F74,            16F76, 16F77, 16F818, 16F819, 16F83, 16F84, 16F870, 16F871, 16F872, 16F873, 16F873A,            16F874, 16F874A, 16F876, 16F876A, 16F877, 16F877A, 17C42A, 17C43, 17C44, 17C752,            17C756, 17C762, 17C766</p>
Hardware debugging	<p><b>Microchip</b> MPLAB (no ICE support anymore from V2.22A):            Integration into the MPLAB project manager as well as improved debugging support by enhancing our COFF support.  <i>The IAR recommendation for hardware debugging environment will be MPLAB with a tight integration of the EWPIC compiler, assembler and linker.</i></p>
RTOS	

EWPIC18 - P6 (P7 from V3.10)	
MCUs/Chips	<p><b>Microchip:</b>            PIC18Cxxx &amp; PIC18Fxxx            18C242, 18C252, 18C442, 18C452, 18C601, 18C658, 18C801, 18C858            18F1220, 18F1320, 18F2220, 18F2320, 18F2331, 18F242, 18F2431, 18F2439, 18F248,            18F252, 18F2539, 18F258, 18F4220, 18F4320, 18F4331, 18F442, 18F4431, 18F4439,            18F448, 18F452, 18F4539, 18F458, 18F6620, 18F6720, 18F8620, 18F8720, 18F6525,            18F6585, 18F6621, 18F6680, 18F8525, 18F8585, 18F8621 and 18F8680</p>
Hardware debugging	<p><b>Microchip</b> MPLAB (no ICE support anymore from V3.10A):            Integration into the MPLAB project manager as well as improved debugging support by enhancing our COFF support.  <i>The IAR recommendation for hardware debugging environment will be MPLAB with a tight integration of the EWPIC18 compiler, assembler and linker.</i></p>
RTOS	

EWdsPIC - P6 (P7 from V2.10)	
MCUs/Chips	<p><b>Microchip:</b> dsPIC            30F20xx, 30F30xx, 30F40xx, 30F50xx, 30F60xx</p>
Hardware debugging	<p><b>Microchip</b> MPLAB            Integration into the MPLAB project manager as well as improved debugging support by enhancing our COFF support  <i>The IAR recommendation for hardware debugging environment will be MPLAB with a tight integration of the EWdsPIC compiler, assembler and linker.</i></p>
RTOS	

EW6811 - P5	
MCUs/Chips	<p><b>Freescal/Motorola:</b> M68HC11 with all derivatives M68HC11D0, D3, E0, E1, E9, E20, F1, FC0, K0, K1, K4, KS2, KW1, P1, P2. M68HC711D3, E9, KS2</p> <p><b>Toshiba:</b> TMP68HC11</p>
Hardware debugging	<p>C-SPY ROM-monitor pre-configured for <b>Freescal/Motorola</b> M68HC11 EVB, M68HC11 EVM and M68HC11 EVS (also including F1, D3, E20, K4) evaluation boards.</p> <p>Source files included for configuration of the monitor to your own board. The ROM-monitor occupies 8K ROM and 1K RAM and one serial port. Applications must be run in RAM to be debuggable. C-SPY also supports banked memory with the EVSK4 board.</p>
RTOS	

EW6812 - P5 (P7 from EWHCS12 V3.10)	
MCUs/Chips	<p><b>Freescal/Motorola:</b> <b>M68HC12 family:</b> MC68HC812A4, MC68HC912B32, BC32, BD32, BE32, D60, D60A, DA128, DG128, DG128A, DT128A</p> <p><b>HCS12 family:</b> MC9S12A64, A128, A128B, A256, A256B, A512, B64, B128, B256, C32, D32, D64, DB128, DB128B, DG128, DG128B, DG128E, DG256, DG256B, DG256C, DJ64, DJ128, DJ128B, DJ128E, DJ256, DJ256B, DJ256C, DJ512, DP256B, DP256C, DP512, DT128, DT128B, DT128E, DT256, DT256B, DT256C, DT512, E64, E128B, E256, H128, H256</p>
Hardware debugging	<p>C-SPY BDM debugger for <b>Freescal/Motorola</b> EVB boards with support for EEPROM/Flash programming and the following cables:</p> <ul style="list-style-type: none"> <li>- <b>Freescal/Motorola</b> SDI serial port cable</li> <li>- <b>P&amp;E Microcomputer System</b> CABLE 12, CABLE 12HS, Multilink USB cable, parallel port cable and Cyclone PRO.</li> </ul> <p>Work with</p> <ul style="list-style-type: none"> <li>- <b>Axiom</b> CML12S-DP256 board</li> <li>- <b>Elektronikladen</b> HCS12 T-Board with a Freescal/Motorola SDI</li> </ul>
RTOS	<p>General support for <b>Micrium:</b> <math>\mu</math>C/OS-II <b>Segger:</b> embOS</p>

EWCR16, EWCR16-DIP, EWDIP - P5	
MCUs/Chips	<b>National Semiconductor:</b> CompactRISC™ CR16 with derivatives PC87570, CR16MHR6, NSAM266, SC14402, 404/5, 422 & 424
Hardware debugging	C-SPY ROM-monitor for - <b>Nationals</b> Dedicated Instructions Processor (DIP) in the SC1440-series. - <b>National's</b> ADB's/USB boards with TMON Monitor program, such as CR16-HWA-ADB, NSV-AM265-ADB, etc. The TMON Monitor program is available from National.
RTOS	

EWCOP8 - P5	
MCUs/Chips	<b>National Semiconductor:</b> COP888BC, CF, CL, CS, EB, EK, FH, GD, GW COP8ACC, AJC, AKC, AME, ANE COP8CBC, CBE, CBG, CBR, CCC, CCE, CCG, CCR, CDC, CDE, CDG, CDR, CFC, CFE COP8FGE COP8SA, SBC, SBE, SBG, SBR, SCC, SCE, SCG, SCR, SDC, SDE, SDG, SDR, SE, SFC, SFE, SG, SGG, SGH, SGK
Hardware debugging	C-SPY Emulator support for <b>MetaLinks</b> iceMaster emulator, Evaluation Programming Unit (EPU) and Debug Module (DM), such as DMFLASH-00, iceMASTER-WA500, iceMASTER-AD Model 400.
RTOS	

EWCR16C, EWCR16C-SC - P6 (P7 from V2.10)	
MCUs/Chips	<b>National Semiconductor:</b> CR16C, SC14xxx Im9704, Imx5100
Hardware debugging	CR16C and SC14 C-SPY drivers for <b>Nexus</b> Class I interface, using the built-in on-chip debug support in CR16C (using the Nexus 5001 standard for debugging). The required HAL/TAL communication software from NSC is included.
RTOS	

EWV850 - P6 (P7 from V3.10)	
MCUs/Chips	<p><b>NEC:</b> All V850 and V850E derivatives V850, V850E, V851, V852, V853 and V854</p>
Hardware debugging	<p>C-SPY emulator support for <b>NEC</b> emulator series (EXEC interface):</p> <ul style="list-style-type: none"> <li>• IE-703000-MC series (current emulator version is IE-703002-MC),</li> <li>• IE-703100-MC series (current emulator version is IE-703102-MC),</li> <li>• IE-V850E-MC series</li> <li>• IE-V850ES-GI/K_Line</li> <li>• IE-V850ESK1-ET</li> <li>• Smartstation SS-V850 ICE</li> <li>• IECUBE (available in 2004-08 or v3.10A)</li> </ul> <p>N-Wire debugger for <b>NEC</b> IE-V850E1-CD-NW interface card. The N-Wire driver has a subset of the IAR C-SPY emulator debugger driver features. It supports the NEC's N-Wire on-chip debug (OCD). By simply connecting the IE-V850E1-CD-NW PCMCIA interface card from NEC to the PC, you can use all the project management and build tools included in the IAR Embedded Workbench for V850 as well as the entire functionality of the C-SPY debugger while benefiting from NEC's sophisticated on-chip debugging and emulation solution.</p> <p>V850, V850E and V850ES C-SPY ROM-Monitor support:</p> <ul style="list-style-type: none"> <li>• <b>NEC</b> RT-V853 board and startWARE</li> <li>• <b>Phoenix</b> starterkit for V850/IA1</li> <li>• <b>COSMO</b> V850E/IA1 and V850E/MA1</li> </ul> <p>2K RAM and 128K EPROM, see EW manual. Source included for user reconfiguration or adaptation to other boards.</p>
RTOS	<p>Plug-in modules for <b>OSE:</b> ENEA OSE (included in EWV850/EWV850-PRO) - Provides detailed information about the RTOS, the tasks and logged events. - Live breakpoints allows one task to be stopped while the system continues to execute the other tasks.</p> <p><b>Micrium <math>\mu</math>C/OS-II</b> (Plug-In from Micrium) Allows you to display <b><math>\mu</math>C/OS-II</b>'s internal data structures in a convenient series of windows integrated with the C SPY Debugger within the IAR Embedded Workbench. This provides you with information about each of the active tasks in the target application, about each semaphore, mutex, mailbox, queue and event flag group along with a list of all the tasks waiting on these kernel objects, and more.</p> <p>General support for <b>Segger embOS</b> (order from Segger) <b>CMX</b> CMX-RTX RTOS</p>

EW78400 – P5	
MCUs/Chips	<b>NEC:</b> All 78K/IV derivatives
Hardware debugging	No C-SPY debugger. The NEC simulators and emulators can read the XCOFF debug format generated by IAR.
RTOS	General support for

	<a href="#">Micrium</a> $\mu$ C/OS-II
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### EW78K \* - P7

MCUs/Chips	<b>NEC:</b> All 78K0 and 78K0/S derivatives
Hardware debugging	C-SPY emulator for <b>NEC</b> emulator series (EXEC interface): included in EW <ul style="list-style-type: none"> <li>• IE-78K0K1-ET</li> <li>• IE-78K0-NS</li> <li>• IE-78K0-NS-A</li> <li>• IE-78K0S-NS-A</li> </ul> (IECUBE and MINICUBE will be supported in V4.20A)
RTOS	

\*From V4.11A, EW78000 has been renamed as EW78K

### EWR8C – P6 (P7 from V3.10)

MCUs/Chips	<b>Renesas:</b> R8C/1x
Hardware debugging	C-SPY ROM-monitor for <b>Renesas:</b> <ul style="list-style-type: none"> <li>• M3A-0111 board (via USB-monitor)</li> <li>• 3 Diamonds board</li> </ul> One serial and one USB C-SPY ROM-monitor driver for the Renesas ROM-monitor program. With these drivers, C-SPY can connect to any board with the Renesas ROM-monitor program programmed. Either via an RS232 connection, USB or via the Renesas USB monitor board M3A-0665.
RTOS	

### EWSH – P5

MCUs/Chips	<b>Renesas/Hitachi:</b> SuperH SH1, SH2, SH3, SH2-DSP and SH3-DSP
Hardware debugging	
RTOS	

### EWH8300 – P5

MCUs/Chips	<b>Renesas/Hitachi:</b> <b>H8/300 family:</b> 310, 32x, 33x, 310x, 311x, 3202, 321x, 3256, 3257, 329x, 3318, 333x, 339x, 343x, 3502, 3522, 3534. <b>H8/300L family:</b> H8/361x, 362x, 363x, 364x, 365x, 371x, 372x, 380x, 3802x, 381x, 382x, 383x, 384x, 385x, 386x, 387x, 388x, 392x, 394x, 397x.
Hardware debugging	
RTOS	General support for <b>Micrium</b> $\mu$ C/OS-II,

EWH8 – P5 (P7 from V2.10)	
MCUs/Chips	<p><b>Renesas/Hitachi</b>  <b>H8/300H family:</b> 3002, 3003, 3004, 3007, 3032, 3035, 3039, 3042, 3048, 3052, 3062,3064, 3067</p> <p><b>H8S family:</b> 2128, 2138, 2144, 2148, 2214, 2215, 2238, 2245, 2338, 2345, 2350, 2355, 2357, 2368, 2377, 25xx, 2612, 2623, 2633, 2636, 2655, 2678,</p> <p><b>H8 tiny family:</b> 36014, 3664, 3672, 3687, 3694</p>
Hardware debugging	<p>Work with <b>Renesas/Hitachi</b> emulator and Evaluation boards via Renesas HEW debugger, need to download UBROF format from Renesas website for HEW.</p>
RTOS	<p>General support for <b>CMX CMX-RTX RTOS</b>  <b>Micrium µC/OS-II</b></p>

EW7700 – P5	
MCUs/Chips	<p><b>Renesas/Mitsubishi:</b>  M377xx (working with M379xx, no specific feature support)</p>
Hardware debugging	<p>C-SPY ROM-monitor for <b>Renesas/Mitsubishi:</b> MTK7706 training kit  Including source files for configuration of the monitor to your own board. The ROM-monitor occupies 8K ROM and 1K RAM and one serial port. Applications must be run in RAM to be debuggable.</p> <p>C-SPY emulator interface for <b>Renesas/Mitsubishi:</b> M37000-SBI simple emulator</p>
RTOS	

EW740 – P5	
MCUs/Chips	<p><b>Renesas/Mitsubishi:</b>  M372xx, M374xx, M375xx, M376xx, M38xxx</p>
Hardware debugging	<p>C-SPY emulator interface for <b>Renesas/Mitsubishi:</b> M38000-SBI simple emulator</p> <p>It is a board with pins (pin-compatible with the 740 micro) that you can use to debug your target system by simply replacing the micro controller with the emulator-board. Even if Mitsubishi call it an emulator it uses a standard ROM-monitor interface. It has no other features than a normal ROM-monitor, i.e. no support for trace buffers and H/W breakpoints.</p>
RTOS	

EWM16C – P6 (P7 from V3.10)	
MCUs/Chips	<b>Renesas/Mitsubishi:</b> M16C/10, M16C/2x, M16C/3x, M16C/6x, R8C/1x
Hardware debugging	<p>C-SPY ROM-monitor (ROM-monitor program from Renesas), supports the following evaluation boards:</p> <ul style="list-style-type: none"> <li>- <b>Renesas/Mitsubishi:</b> <ul style="list-style-type: none"> <li>• 3 Diamond kit</li> <li>• MSV30222</li> <li>• MSA0654</li> <li>• MDECE0201</li> <li>• MSV1632/62 board (via USB-monitor)</li> <li>• MSV-MINI26 board</li> <li>• RDECE2662P board</li> <li>• M16C demo board</li> </ul> </li> <li>- <b>GLYN</b> EVBM16C/6x evaluation board</li> <li>- Other boards with Renesas ROM-monitor.</li> </ul> <p>One serial and one USB C-SPY ROM-monitor driver for the Renesas ROM-monitor program. With these drivers, C-SPY can connect to any board with the Renesas ROM-monitor program programmed. Either via an RS232 connection, USB or via the Renesas USB monitor board M3A-0665.</p> <p>Debug output formats from the IAR Embedded Workbench are compatible with:</p> <p><b>Renesas/Mitsubishi:</b> PC4701 and PC7501 series of Emulators (IEEE-695 and Elf/Dwarf),</p> <ul style="list-style-type: none"> <li>• <b>Nohau</b> EMUL5-M16C-PC (full UBROF support),</li> <li>• <b>Ashling</b> Microsystems PathFinder</li> <li>• <b>Sophia Systems</b> HyperSTAC for M16C</li> </ul>
RTOS	General support for <b>Micrium:</b> $\mu$ C/OS-II, <b>Segger:</b> embOS

EWM32C - P6 (P7 from V3.10)	
MCUs/Chips	<b>Renesas/Mitsubishi:</b> M308xx, M32C/8x, M16C/8x
Hardware debugging	<p>*C-SPY ROM-monitor for</p> <p><b>Renesas:</b></p> <ul style="list-style-type: none"> <li>• 3 Diamonds board</li> <li>• M16C Demo board</li> </ul> <p>One serial and one USB C-SPY ROM-monitor driver for the Renesas ROM-monitor program. With these drivers, C-SPY can connect to any board with the Renesas ROM-monitor program programmed. Either via an RS232 connection, USB or via the Renesas USB monitor board M3A-0665.</p> <p>Debug output formats from the IAR Embedded Workbench are compatible with:</p> <ul style="list-style-type: none"> <li>• <b>Renesas/Mitsubishi:</b> PC4701 and PC7501 series of Emulators (IEEE-695 and Elf/Dwarf),</li> <li>• <b>Ashling Microsystems</b> PathFinder</li> <li>• <b>Sophia Systems</b>, HyperSTAC for M32C</li> </ul>
RTOS	General support for <b>CMX:</b> CMX-RTX, <b>Micrium:</b> $\mu$ C/OS-II, <b>Segger:</b> embos, <b>Vektor Informatic</b>

\* available in V3.10A

<b>EWSAM8 – P6</b>	
MCUs/Chips	<b>Samsung:</b> SAM8, SAM8x, SAM8xRC, SAM8xRI, SAM8xRCRI and S3C9442.h, S3C9444, S3C9452, S3C9454 derivatives
Hardware debugging	C-SPY emulator interface for <b>Samsung</b> SMDS II+ emulator and OpenICE
RTOS	

<b>EWMK5 – P5</b>	
MCUs/Chips	<b>Sharp:</b> MK5
Hardware debugging	
RTOS	

<b>EW430 – P7</b>	
MCUs/Chips	<b>Texas Instrument</b> MSP430C111, C1111, C112, C1121, C1331, C1351, C311S, C312, C313, C314, C315, C323, C325, C336, C337, C412, C413, E112, E313, E315, E325, E337, F110, F1101, F1111, F112, F1121, F1122, F1132, F122, F1222, F123, F1232, F133, F135, F147, F1471, F148, F1481, F149, F1491, F155, F156, F157, F167, F168, F169, F412, F413, F415, F417, F423, F425, F427, F435, F436, F437, F447, F448, F449, F1610, F1611, F1612, FE423, E425, FE427, FG437, FG438, FG439, FW423, FW425, FW427, P112, P313, P315, P315S, P325, and P337.
Hardware debugging	C-SPY JTAG support for <b>TI's</b> Flash Emulation Tool (FET) and USB FET support* MSP-FET430X110 (for the MSP430F11xIDW, MSP430F11x1IDW, and MSP430F11x2IDW devices) <ul style="list-style-type: none"> <li>• MSP-FET430P120 (for the MSP430F12xIDW and MSP430F12x2IDW devices)</li> <li>• MSP-FET430P140 (for the MSP430F13xIPM and MSP430F14xIPM devices)</li> <li>• MSP-FET430P410 (for the MSP430F41xIPM devices)</li> <li>• MSP-FET430P440 (for the MSP430F43xIPZ and MSP430F44xIPZ devices)</li> </ul> <p><b>For more info on feature improvements, see <a href="#">cs430.htm</a>.</b></p> <p>Work with <b>Olimex</b> "MSP430-449STK-B" board (with an LCD) connected to the PC through their "MSP430-JTAG" cable.</p> <p><b>IAR J-Link USB-driven JTAG interface for MSP430</b> (not included in EW430-PRO and EW430, order separately) J-Link is a small USB-to-JTAG conversion box designed for MSP430. It connects via USB to the PC host running Windows. J-Link integrates seamlessly into the EW430 and is fully plug-and-play compatible:</p> <ul style="list-style-type: none"> <li>▪ Supports all MSP430 devices</li> <li>▪ Download speed up to 20kb/s</li> <li>▪ Fast flashing using Timer output</li> <li>▪ No power supply required, powered through USB</li> <li>▪ Max. JTAG speed 8 MHZ</li> <li>▪ Auto speed recognition</li> <li>▪ All JTAG signals can be monitored, target voltage can be measured</li> <li>▪ 7V output to burn the JTAG fuses to make the device inaccessible</li> </ul>

	<ul style="list-style-type: none"> <li>▪ 14-pin standard JTAG connector</li> <li>▪ USB and 14-pin flat cable included</li> </ul> <p><b>IAR KickStart Development Kit for Texas Instruments's MSP430</b> includes</p> <ul style="list-style-type: none"> <li>▪ MSP430F449 development board</li> <li>▪ JTAG debugger with USB connector</li> <li>▪ 4K Kickstart version of EW430</li> <li>▪ 20-state version of IAR visualSTATE for MSP430</li> </ul> <p>The KickStart Card has the following features:</p> <ul style="list-style-type: none"> <li>• MSP430F449 MCU with 60 Kbytes program flash and 2 Kbytes RAM</li> <li>• 14-pin JTAG interface connector</li> <li>• RS232 interface circuit with Tx, Rx signals</li> <li>• Dallas touch button port</li> <li>• Frequency input</li> <li>• LCD custom display</li> <li>• LED status</li> <li>• Four buttons</li> <li>• Buzzer</li> <li>• 2xAA 1,5V battery holder</li> <li>• Extension headers for <math>\mu</math>C pins</li> <li>• Dimensions: 76.2x64mm (3x2.5")</li> </ul>
RTOS	<p>General support for</p> <p><b>CMX:</b> CMX-RTX RTOS,</p> <p><b>Micrium:</b> <math>\mu</math>C/OS-II,</p> <p><b>Pumpkin:</b> Salvo,</p> <p><b>Segger</b> embOS</p>

\* USB FET support in V3.21A!

EW6502 – P5	
MCUs/Chips	<b>Western Design Center:</b> 6502/65C02
Hardware debugging	
RTOS	

EWZ80 – P5	
MCUs/Chips	<b>ZiLOG:</b> Z80, Z84011, C11, 013, C13, 015, C15, C50 Z80180, S180, 181, 182, 183
Hardware debugging	
RTOS	General support for <b>Micrium:</b> $\mu$ C/OS-II

EWeZ80 – P6	
MCUs/Chips	<b>ZiLOG:</b> eZ80, eZ80190
Hardware debugging	C-SPY emulator support for <b>ZiLOG</b> ZPAK-II emulator. Need install firmware from ZiLOG (Old firmware 1.4 does not work with F91 derivatives, firmware 1.6 does work. To reinstall the firmware, separate flash utility is needed (from Zilog, MatsP how do they get this?).  <b>First Silicon Solutions'</b> ISA--eZ80 emulator. <a href="http://www.fs2.com">www.fs2.com</a> Driver for FS2's ISA-eZ80 emulator plug-in available from FS2.
RTOS	