This document outlines the device support, new features added in 4.0.2, fixed issues and open issues in e² studio 4.0.2.

1. Project Generator Support

CPU	Family	Devices
RH850	C1H	R7F701260, R7F701270,(Debug Support Only)
	C1M	R7F701263, R7F701271,(Debug Support Only)
	E1L	R7F701201, R7F701205,(Debug Support Only)
	E1M-S	R7F701202, R7F701204,(Debug Support Only)
	E1x-FCC1	R7F701Z05, R7F701Z06, R7F701Z07,(Debug Support Only)
	F1H	R7F701501, R7F701502xAFP, R7F701503, R7F701506, R7F701507, R7F701508, R7F701511, R7F701512, R7F701513,(Debug Support Only)
	F1H-GW	R7F701521, R7F701522, R7F701524, R7F701525,(Debug Support Only)
	F1L	R7F701006xAFP, R7F701007xAFP, R7F701008xAFP, R7F701009xAFP, R7F701010xAFP, R7F701011xAFP, R7F701012xAFP, R7F701013xAFP, R7F701014xAFP, R7F701015xAFP, R7F701016xAFP, R7F701017xAFP, R7F701018xAFP, R7F701019xAFP, R7F701020xAFP, R7F701021xAFP, R7F701022xAFP, R7F701023xAFP, R7F701024xAFP, R7F701025xAFP, R7F701026xAFP, R7F701027xAFP, R7F701028xAFP, R7F701029xAFP, R7F701030xAFP, R7F701032xAFP, R7F701033xAFP, R7F701034xAFP, R7F701040, R7F701041, R7F701042, R7F701043, R7F701044, R7F701045, R7F701046, R7F701047, R7F701048, R7F701049, R7F701050, R7F701051, R7F701052, R7F701053, R7F701054, R7F701055, R7F701056, R7F701057,(Debug Support Only)
	F1L-GW	R7F701002xAFP, R7F701003xAFP,(Debug Support Only)
	F1M	R7F701544, R7F701545, R7F701548, R7F701549, R7F701552, R7F701553, R7F701564, R7F701565, R7F701568, R7F701569, R7F701572, R7F701573,(Debug Support Only)
	P1M	R7F701304, R7F701305, R7F701310, R7F701311, R7F701312, R7F701313, R7F701314, R7F701315, R7F701318, R7F701319, R7F701320, R7F701321, R7F701322, R7F701323,(Debug Support Only)
	-	R7F701060xAFP, R7F701062xAFP, R7F701064xAFP, R7F701065xAFP, R7F701067xAFP, R7F701069xAFP, R7F701071xAFP,(Debug Support Only)
RL78	D1A	R5F10CGB, R5F10CGC, R5F10CGD, R5F10CLD, R5F10CMD, R5F10CME, R5F10DGC, R5F10DGD, R5F10DGE, R5F10DLD, R5F10DLE, R5F10DMD, R5F10DME, R5F10DMF, R5F10DMG, R5F10DMJ, R5F10DPE, R5F10DPF, R5F10DPG, R5F10DPJ, R5F10DPK, R5F10DPL, R5F10DSJ, R5F10DSK, R5F10DSL, R5F10TPJ
	F12	R5F10968, R5F1096A, R5F1096B, R5F1096C, R5F1096D, R5F1096E, R5F109AA, R5F109AB, R5F109AC, R5F109AD, R5F109AE, R5F109BA, R5F109BB, R5F109BC, R5F109BD, R5F109BE, R5F109GA, R5F109GB, R5F109GC, R5F109GD, R5F109GE, R5F109LA, R5F109LB, R5F109LC, R5F109LD, R5F109LE
	F13	R5F10A6A, R5F10A6C, R5F10A6D, R5F10A6E, R5F10AAA, R5F10AAC, R5F10AAD, R5F10AAE, R5F10ABA, R5F10ABC, R5F10ABD, R5F10ABE, R5F10AGA, R5F10AGC, R5F10AGD, R5F10AGE, R5F10AGF, R5F10AGG, R5F10ALC, R5F10ALD, R5F10ALE, R5F10ALF, R5F10ALG, R5F10AME, R5F10AMF, R5F10AMG, R5F10BAC, R5F10BAD, R5F10BAE, R5F10BAF, R5F10BAG, R5F10BBC, R5F10BBD, R5F10BBE, R5F10BBF, R5F10BBG, R5F10BGC, R5F10BGD, R5F10BGE, R5F10BGF, R5F10BGG, R5F10BLC, R5F10BLD, R5F10BLE, R5F10BLF, R5F10BLG, R5F10BME, R5F10BMF, R5F10BMG

	F14	R5F10PAD, R5F10PAE, R5F10PBD, R5F10PBE, R5F10PGD, R5F10PGE, R5F10PGF, R5F10PGG, R5F10PGH, R5F10PGJ, R5F10PLE, R5F10PLF, R5F10PLG, R5F10PLH, R5F10PLJ, R5F10PME, R5F10PMF, R5F10PMG, R5F10PMH, R5F10PMJ, R5F10PPE, R5F10PPF, R5F10PPG, R5F10PPH, R5F10PPJ
	F1A	R5F114GC, R5F114GD, R5F114GE, R5F114GF, R5F114GG
	G10	R5F10Y14, R5F10Y16, R5F10Y17, R5F10Y44, R5F10Y46, R5F10Y47
	G12	R5F10266, R5F10267, R5F10268, R5F10269, R5F1026A, R5F10277, R5F10278, R5F10279, R5F1027A, R5F102A7, R5F102A8, R5F102A9, R5F102AA, R5F10366, R5F10367, R5F10368, R5F10369, R5F1036A, R5F10377, R5F10378, R5F10379, R5F1037A, R5F103A7, R5F103A8, R5F103A9, R5F103AA
	G13	R5F1006A, R5F1006C, R5F1006D, R5F1006E, R5F1007A, R5F1007C, R5F1007D, R5F1007E, R5F1008A, R5F1008C, R5F1008D, R5F1008E, R5F100AA, R5F100AC, R5F100AD, R5F100AE, R5F100AF, R5F100AG, R5F100BA, R5F100BC, R5F100BD, R5F100BE, R5F100BF, R5F100BG, R5F100CA, R5F100CC, R5F100CD, R5F100CE, R5F100CF, R5F100CG, R5F100EA, R5F100EC, R5F100ED, R5F100EE, R5F100EF, R5F100EG, R5F100EH, R5F100FA, R5F100FC, R5F100FD, R5F100FE, R5F100FF, R5F100FG, R5F100FH, R5F100FJ, R5F100FK, R5F100FL, R5F100GA, R5F100GC, R5F100GD, R5F100GE, R5F100GF, R5F100GG, R5F100GH, R5F100GJ, R5F100GK, R5F100GL, R5F100JC, R5F100JD, R5F100JE, R5F100JF, R5F100JG, R5F100JH, R5F100JJ, R5F100JK, R5F100JL, R5F100LC, R5F100LD, R5F100LE, R5F100LF, R5F100LG, R5F100LH, R5F100LJ, R5F100LK, R5F100LL, R5F100MF, R5F100MG, R5F100MH, R5F100MJ, R5F100MK, R5F100ML, R5F100PF, R5F100PG, R5F100PH, R5F100PJ, R5F100PK, R5F100PL, R5F100SH, R5F100SJ, R5F100SK, R5F100SL, R5F1016A, R5F1016C, R5F1016D, R5F1016E, R5F1017A, R5F1017C, R5F1017D, R5F1017E, R5F1018A, R5F1018C, R5F1018D, R5F1018E, R5F101AA, R5F101AC, R5F101AD, R5F101AE, R5F101AF, R5F101AG, R5F101BA, R5F101BC, R5F101BD, R5F101BE, R5F101BF, R5F101BG, R5F101CA, R5F101CC, R5F101CD, R5F101CE, R5F101CF, R5F101CG, R5F101EA, R5F101EC, R5F101ED, R5F101EE, R5F101EF, R5F101EG, R5F101EH, R5F101FA, R5F101FC, R5F101FD, R5F101FE, R5F101FF, R5F101FG, R5F101FH, R5F101FJ, R5F101FK, R5F101FL, R5F101GA, R5F101GC, R5F101GD, R5F101GE, R5F101GF, R5F101GG, R5F101GH, R5F101GJ, R5F101GK, R5F101GL, R5F101JC, R5F101JD, R5F101JE, R5F101JF, R5F101JG, R5F101JH, R5F101JJ, R5F101JK, R5F101JL, R5F101LC, R5F101LD, R5F101LE, R5F101LF, R5F101LG, R5F101LH, R5F101LJ, R5F101LK, R5F101LL, R5F101MF, R5F101MG, R5F101MH, R5F101MJ, R5F101MK, R5F101ML, R5F101PF, R5F101PG, R5F101PH, R5F101PJ, R5F101PK, R5F101PL, R5F101SH, R5F101SJ, R5F101SK, R5F101SL
	G14	R5F104AA, R5F104AC, R5F104AD, R5F104AE, R5F104AF, R5F104AG, R5F104BA, R5F104BC, R5F104BD, R5F104BE, R5F104BF, R5F104BG, R5F104CA, R5F104CC, R5F104CD, R5F104CE, R5F104CF, R5F104CG, R5F104EA, R5F104EC, R5F104ED, R5F104EE, R5F104EF, R5F104EG, R5F104EH, R5F104FA, R5F104FC, R5F104FD, R5F104FE, R5F104FF, R5F104FG, R5F104FH, R5F104FJ, R5F104GA, R5F104GC, R5F104GD, R5F104GE, R5F104GF, R5F104GG, R5F104GH, R5F104GJ, R5F104GK, R5F104GL, R5F104JC, R5F104JD, R5F104JE, R5F104JF, R5F104JG, R5F104JH, R5F104JJ, R5F104LC, R5F104LD, R5F104LE, R5F104LF, R5F104LG, R5F104LH, R5F104LJ, R5F104LK, R5F104LL, R5F104MF, R5F104MG, R5F104MH, R5F104MJ, R5F104MK, R5F104ML, R5F104PF, R5F104PG, R5F104PH, R5F104PJ, R5F104PK, R5F104PL
	G1A	R5F10E8A, R5F10E8C, R5F10E8D, R5F10E8E, R5F10EBA, R5F10EBC, R5F10EBD, R5F10EBE, R5F10EGA, R5F10EGC, R5F10EGD, R5F10EGE, R5F10ELC, R5F10ELD, R5F10ELE
	G1C	R5F10JBC, R5F10JGC, R5F10KBC, R5F10KGC
	G1D	R5F11AGG, R5F11AGH, R5F11AGJ
	G1E	R5F10FLC, R5F10FLD, R5F10FLE, R5F10FMC, R5F10FMD, R5F10FME
	G1F	R5F11B7C, R5F11B7E, R5F11BBC, R5F11BBE, R5F11BCC, R5F11BCE, R5F11BGC, R5F11BGE, R5F11BLC, R5F11BLE

	G1G	R5F11EA8, R5F11EAA, R5F11EB8, R5F11EBA, R5F11EF8, R5F11EFA
	I1A	R5F1076C, R5F107AC, R5F107AE, R5F107DE
	I1B	R5F10MME, R5F10MMG, R5F10MPE, R5F10MPG, R5F11CBC, R5F11CCC
	I1D	R5F11768, R5F1176A, R5F11778, R5F1177A, R5F117A8, R5F117AA, R5F117AC, R5F117BA, R5F117BC, R5F117GA, R5F117GC
	L12	R5F10RB8, R5F10RBA, R5F10RBC, R5F10RF8, R5F10RFA, R5F10RFC, R5F10RG8, R5F10RGA, R5F10RGC, R5F10RJ8, R5F10RJA, R5F10RJC, R5F10RLA, R5F10RLC
	L13	R5F10WLA, R5F10WLC, R5F10WLD, R5F10WLE, R5F10WLF, R5F10WLG, R5F10WMA, R5F10WMC, R5F10WMD, R5F10WME, R5F10WMF, R5F10WMG
	L1C	R5F110ME, R5F110MF, R5F110MG, R5F110MH, R5F110MJ, R5F110NE, R5F110NF, R5F110NG, R5F110NH, R5F110NJ, R5F110PE, R5F110PF, R5F110PG, R5F110PH, R5F110PJ, R5F111ME, R5F111MF, R5F111MG, R5F111MH, R5F111MJ, R5F111NE, R5F111NF, R5F111NG, R5F111NH, R5F111NJ, R5F111PE, R5F111PF, R5F111PG, R5F111PH, R5F111PJ
	110	R5F51101, R5F51103, R5F51104, R5F51105, R5F5110H, R5F5110J
RX	111	R5F51111, R5F51113, R5F51114, R5F51115, R5F51116, R5F51117, R5F51118, R5F5111J
	113	R5F51135, R5F51136, R5F51137, R5F51138
	210	R5F52103, R5F52104, R5F52105, R5F52106, R5F52107, R5F52108, R5F5210A, R5F5210B
	21A	R5F521A6, R5F521A7, R5F521A8
	220	R5F52201, R5F52203, R5F52205, R5F52206
	230	R5F52305, R5F52306
	231	R5F52315, R5F52316, R5F52317, R5F52318
	23T	R5F523T3, R5F523T5
	610	R5F56104, R5F56106, R5F56107, R5F56108
	621	R5F56216, R5F56217, R5F56218
	62G	R5F562G7, R5F562GA
	62N	R5F562N7, R5F562N8
	62T	R5F562T6, R5F562T7, R5F562TA
	630	R5F56307, R5F56308, R5F5630A, R5F5630B, R5F5630D, R5F5630E
	631	R5F56316, R5F56317, R5F56318, R5F5631A, R5F5631B, R5F5631D, R5F5631E, R5F5631F, R5F5631G, R5F5631J, R5F5631K, R5F5631M, R5F5631N, R5F5631P, R5F5631W, R5F5631Y, R5S56310 R5F5631MF, R5F5631PF,(Debug Support Only)
	634	R5F5634B, R5F5634D, R5F5634E R5F5634B_5V, R5F5634D_5V, R5F5634EW, R5F5634E_5V,(Debug Support Only)
	63N	R5F563NA, R5F563NB, R5F563ND, R5F563NE, R5F563NF, R5F563NK, R5F563NW, R5F563NY
	63T	R5F563T4, R5F563T5, R5F563T6, R5F563TB, R5F563TC, R5F563TE R5F563TB_5V, R5F563TC_5V, R5F563TE_5V,(Debug Support Only)
	64M	R5F564MF, R5F564MG, R5F564MJ, R5F564ML
	71M	R5F571MF, R5F571MG, R5F571MJ, R5F571ML

	A1	R7S72100, R7S721001, R7S72101, R7S72102 R7S721001_DualSPI, R7S721020, R7S721020_DualSPI, R7S721021, R7S721021_DualSPI,(Debug Support Only)
RZ	T1	R7S910001, R7S910002, R7S910006, R7S910007, R7S910011, R7S910013, R7S910015, R7S910016, R7S910017, R7S910018, R7S910101, R7S910102, R7S910106, R7S910107, R7S910111, R7S910113, R7S910115, R7S910116, R7S910117, R7S910118 R7S910015_M3, R7S910016_M3, R7S910017_M3, R7S910018_M3, R7S910115_M3, R7S910116_M3, R7S910117_M3, R7S910118_M3,(Debug Support Only)
		CUSTOM_DEVICE_1, SH-2A_C_1C3A_3, SH-2A_C_1C3A_4, SH-2A_C_1C3A_5, SH-2A_C_1C3A_6, SH-2A_C_1C3A_F, SH-2_CUSTOM_MCU, SH2A_CUSTOM_MCU1, SH2A_CUSTOM_SOC_1, SH2A_CUSTOM_SOC_2, SH2A_CUSTOM_SOC_3, SH2A_CUSTOM_SOC_4, SH2A_CUSTOM_SOC_5, SH70835A, SH70835R, SH70845A, SH70845R, SH70855A, SH70855R, SH70865R, SH71243, SH71253, SH71464R, SH71494A, SH71494R, SH7214, SH72145AD, SH72145BD, SH72146AD, SH72146BD, SH72147AD, SH72147BD, SH7215, SH72165BD, SH72166AD, SH72166BD, SH72167AD, SH72167AD_Option, SH72167BD, SH72265, SH72266, SH72267, SH72275, SH72276, SH72277, SH72314L, SH72315A, SH72315L, SH72374A, SH72374B, SH72375B, SH72394A, SH72395A, SH72395B, SH72531, SH72531FCC, SH72531RFCC, SH72533, SH72533FCC, SH72543R, SH72544R, SH72546R, SH72612, SH7261_FPULess, SH72621, SH72622, SH72623, SH72624, SH72625, SH72626, SH72627, SH72631, SH72632, SH72633, SH72641, SH72642, SH72643, SH72644, SH72645, SH72646, SH72647, SH72660, SH72661, SH72662, SH72663, SH72670, SH72671, SH72672, SH72673, SH72680, SH72681, SH72691, SH7606, SH7618A, SH7671, SH7672, SH7673,(Debug Support Only)
SH	SH2	SH7047F, SH70834A, SH70844A, SH70854A, SH70865A, SH71242, SH71252, SH7144F, SH7145F, SH71464A, SH71491R, SH7615, SH7616, SH7618, SH7619
	SH2A-FPU	SH72394B
	SH2a	SH7201, SH7203, SH72165AD, SH72546RFCC, SH72611, SH72620, SH72630, SH72640, SH72690, SH7670
	SH2a (No FPU)	SH7206, SH7211, SH7243, SH7285, SH7286

2. Code Generator Support

CPU	Family	Devices
RL78	F12	R5F10968, R5F1096A, R5F1096B, R5F1096C, R5F1096D, R5F1096E, R5F109AA, R5F109AB, R5F109AC, R5F109AD, R5F109AE, R5F109BA, R5F109BB, R5F109BC, R5F109BD, R5F109BE, R5F109GA, R5F109GB, R5F109GC, R5F109GD, R5F109GE, R5F109LA, R5F109LB, R5F109LC, R5F109LD, R5F109LE
	F13	R5F10A6A, R5F10A6C, R5F10A6D, R5F10A6E, R5F10AAA, R5F10AAC, R5F10AAD, R5F10AAE, R5F10ABA, R5F10ABC, R5F10ABD, R5F10ABE, R5F10AGA, R5F10AGC, R5F10AGD, R5F10AGE, R5F10AGF, R5F10AGG, R5F10ALC, R5F10ALD, R5F10ALE, R5F10ALF, R5F10ALG, R5F10AME, R5F10AMF, R5F10AMG, R5F10BAC, R5F10BAD, R5F10BAE, R5F10BAF, R5F10BAG, R5F10BBC, R5F10BBD, R5F10BBE, R5F10BBF, R5F10BBG, R5F10BGC, R5F10BGD, R5F10BGE, R5F10BGF, R5F10BGG, R5F10BLC, R5F10BLD, R5F10BLE, R5F10BLF, R5F10BLG, R5F10BME, R5F10BMF, R5F10BMG
	F14	R5F10PAD, R5F10PAE, R5F10PBD, R5F10PBE, R5F10PGD, R5F10PGE, R5F10PGF, R5F10PGG, R5F10PGH, R5F10PGJ, R5F10PLE, R5F10PLF, R5F10PLG, R5F10PLH, R5F10PLJ, R5F10PME, R5F10PMF, R5F10PMG, R5F10PMH, R5F10PMJ, R5F10PPE, R5F10PPF, R5F10PPG, R5F10PPH, R5F10PPJ
	G10	R5F10Y14, R5F10Y16, R5F10Y17, R5F10Y44, R5F10Y46, R5F10Y47
	G12	R5F10266, R5F10267, R5F10268, R5F10269, R5F1026A, R5F10277, R5F10278, R5F10279, R5F1027A, R5F102A7, R5F102A8, R5F102A9, R5F102AA, R5F10366, R5F10367, R5F10368, R5F10369, R5F1036A, R5F10377, R5F10378, R5F10379, R5F1037A, R5F103A7, R5F103A8, R5F103A9, R5F103AA
	G13	R5F1006A, R5F1006C, R5F1006D, R5F1006E, R5F1007A, R5F1007C, R5F1007D, R5F1007E, R5F1008A, R5F1008C, R5F1008D, R5F1008E, R5F100AA, R5F100AC, R5F100AD, R5F100AE, R5F100AF, R5F100AG, R5F100BA, R5F100BC, R5F100BD, R5F100BE, R5F100BF, R5F100BG, R5F100CA, R5F100CC, R5F100CD, R5F100CE, R5F100CF, R5F100CG, R5F100EA, R5F100EC, R5F100ED, R5F100EE, R5F100EF, R5F100EG, R5F100EH, R5F100FA, R5F100FC, R5F100FD, R5F100FE, R5F100FF, R5F100FG, R5F100FH, R5F100FJ, R5F100FK, R5F100FL, R5F100GA, R5F100GC, R5F100GD, R5F100GE, R5F100GF, R5F100GG, R5F100GH, R5F100GJ, R5F100GK, R5F100GL, R5F100JC, R5F100JD, R5F100JE, R5F100JF, R5F100JG, R5F100JH, R5F100JJ, R5F100JK, R5F100JL, R5F100LC, R5F100LD, R5F100LE, R5F100LF, R5F100LG, R5F100LH, R5F100LJ, R5F100LK, R5F100LL, R5F100MF, R5F100MG, R5F100MH, R5F100MJ, R5F100MK, R5F100ML, R5F100PF, R5F100PG, R5F100PH, R5F100PJ, R5F100PK, R5F100PL, R5F100SH, R5F100SJ, R5F100SK, R5F100SL, R5F1016A, R5F1016C, R5F1016D, R5F1016E, R5F1017A, R5F1017C, R5F1017D, R5F1017E, R5F1018A, R5F1018C, R5F1018D, R5F1018E, R5F101AA, R5F101AC, R5F101AD, R5F101AE, R5F101AF, R5F101AG, R5F101BA, R5F101BC, R5F101BD, R5F101BE, R5F101BF, R5F101BG, R5F101CA, R5F101CC, R5F101CD, R5F101CE, R5F101CF, R5F101CG, R5F101EA, R5F101EC, R5F101ED, R5F101EE, R5F101EF, R5F101EG, R5F101EH, R5F101FA, R5F101FC, R5F101FD, R5F101FE, R5F101FF, R5F101FG, R5F101FH, R5F101FJ, R5F101FK, R5F101FL, R5F101GA, R5F101GC, R5F101GD, R5F101GE, R5F101GF, R5F101GG, R5F101GH, R5F101GJ, R5F101GK, R5F101GL, R5F101JC, R5F101JD, R5F101JE, R5F101JF, R5F101JG, R5F101JH, R5F101JJ, R5F101JK, R5F101JL, R5F101LC, R5F101LD, R5F101LE, R5F101LF, R5F101LG, R5F101LH, R5F101LJ, R5F101LK, R5F101LL, R5F101MF, R5F101MG, R5F101MH, R5F101MJ, R5F101MK, R5F101ML, R5F101PF, R5F101PG, R5F101PH, R5F101PJ, R5F101PK, R5F101PL, R5F101SH, R5F101SJ, R5F101SK, R5F101SL

	G14	R5F104AA, R5F104AC, R5F104AD, R5F104AE, R5F104AF, R5F104AG, R5F104BA, R5F104BC, R5F104BD, R5F104BE, R5F104BF, R5F104BG, R5F104CA, R5F104CC, R5F104CD, R5F104CE, R5F104CF, R5F104CG, R5F104EA, R5F104EC, R5F104ED, R5F104EE, R5F104EF, R5F104EG, R5F104EH, R5F104FA, R5F104FC, R5F104FD, R5F104FE, R5F104FF, R5F104FG, R5F104FH, R5F104FJ, R5F104GA, R5F104GC, R5F104GD, R5F104GE, R5F104GF, R5F104GG, R5F104GH, R5F104GJ, R5F104GK, R5F104GL, R5F104JC, R5F104JD, R5F104JE, R5F104JF, R5F104JG, R5F104JH, R5F104JJ, R5F104LC, R5F104LD, R5F104LE, R5F104LF, R5F104LG, R5F104LH, R5F104LJ, R5F104LK, R5F104LL, R5F104MF, R5F104MG, R5F104MH, R5F104MJ, R5F104MK, R5F104ML, R5F104PF, R5F104PG, R5F104PH, R5F104PJ, R5F104PK, R5F104PL
	G1A	R5F10E8A, R5F10E8C, R5F10E8D, R5F10E8E, R5F10EBA, R5F10EBC, R5F10EBD, R5F10EBE, R5F10EGA, R5F10EGC, R5F10EGD, R5F10EGE, R5F10ELC, R5F10ELD, R5F10ELE
	G1C	R5F10JBC, R5F10JGC, R5F10KBC, R5F10KGC
	G1D	R5F11AGG, R5F11AGH, R5F11AGJ
	G1E	R5F10FLC, R5F10FLD, R5F10FLE, R5F10FMC, R5F10FMD, R5F10FME
	G1F	R5F11B7C, R5F11B7E, R5F11BBC, R5F11BBE, R5F11BCC, R5F11BCE, R5F11BGC, R5F11BGE, R5F11BLC, R5F11BLE
	G1G	R5F11EA8, R5F11EAA, R5F11EB8, R5F11EBA, R5F11EF8, R5F11EFA
	I1A	R5F1076C, R5F107AC, R5F107AE, R5F107DE
	I1B	R5F10MME, R5F10MMG, R5F10MPE, R5F10MPG
	I1D	R5F11768, R5F1176A, R5F11778, R5F1177A, R5F117A8, R5F117AA, R5F117AC, R5F117BA, R5F117BC, R5F117GA, R5F117GC
	L12	R5F10RB8, R5F10RBA, R5F10RBC, R5F10RF8, R5F10RFA, R5F10RFC, R5F10RG8, R5F10RGA, R5F10RGC, R5F10RJ8, R5F10RJA, R5F10RJC, R5F10RLA, R5F10RLC
	L13	R5F10WLA, R5F10WLC, R5F10WLD, R5F10WLE, R5F10WLF, R5F10WLG, R5F10WMA, R5F10WMC, R5F10WMD, R5F10WME, R5F10WMF, R5F10WMG
	L1C	R5F110ME, R5F110MF, R5F110MG, R5F110MH, R5F110MJ, R5F110PE, R5F110PF, R5F110PG, R5F110PH, R5F110PJ, R5F111ME, R5F111MF, R5F111MG, R5F111MH, R5F111MJ, R5F111PE, R5F111PF, R5F111PG, R5F111PH, R5F111PJ
RX	110	R5F51101, R5F51103, R5F51104, R5F51105, R5F5110H, R5F5110J
	111	R5F51111, R5F51113, R5F51114, R5F51115, R5F51116, R5F51117, R5F51118, R5F5111J
	113	R5F51135, R5F51136, R5F51137, R5F51138
	230	R5F52305, R5F52306
	231	R5F52315, R5F52316, R5F52317, R5F52318
	23T	R5F523T3, R5F523T5
	64M	R5F564MF, R5F564MG, R5F564MJ, R5F564ML
	71M	R5F571MF, R5F571MG, R5F571MJ, R5F571ML
RZ	T1	R7S910001, R7S910002, R7S910006, R7S910007, R7S910011, R7S910013, R7S910015, R7S910016, R7S910017, R7S910018, R7S910101, R7S910102, R7S910106, R7S910107, R7S910111, R7S910113, R7S910115, R7S910116, R7S910117, R7S910118

3. Current Smart Manual support

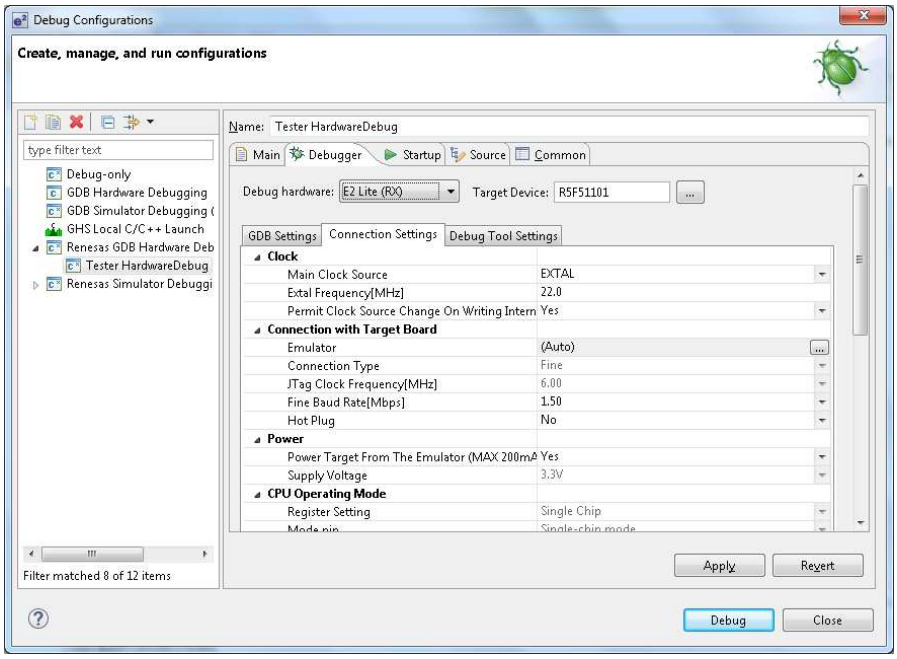
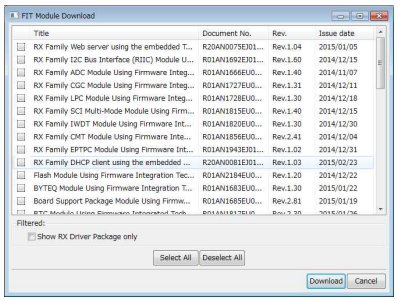
Smart manual support is delivered independently of e² studio releases when available. The following devices are available as of the 22nd of July, 2015:

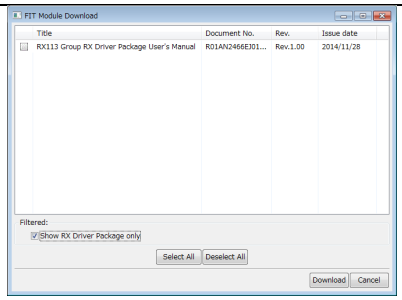
- RX62G
- RX62T
- RX63N
- RX63T
- RX64M
- RX71M
- RX110
- RX111
- RX113
- RX210
- RX220
- RX631

4. What is new in 4.0.2?

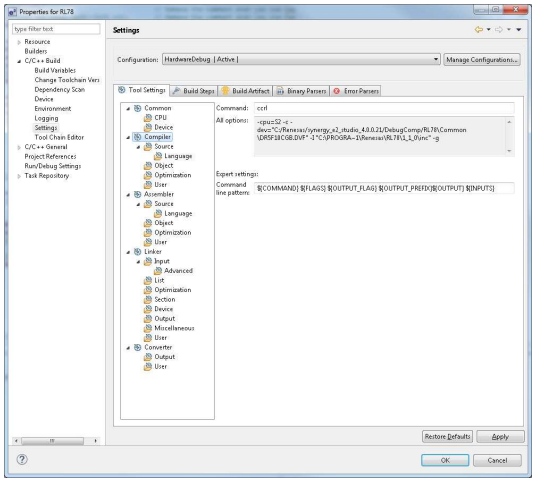
Component	Description
RX Device support	RX device support updated. New groups: RX231, RX230
Code Generator	New support added for: RL78/G1D RX231 RX230

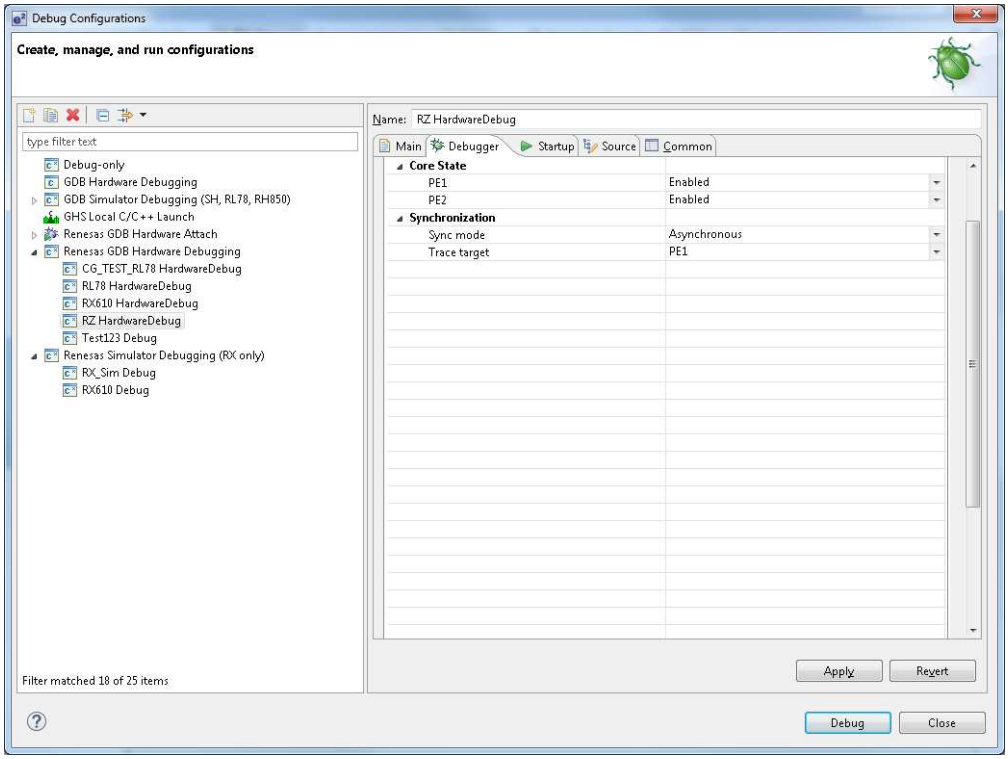
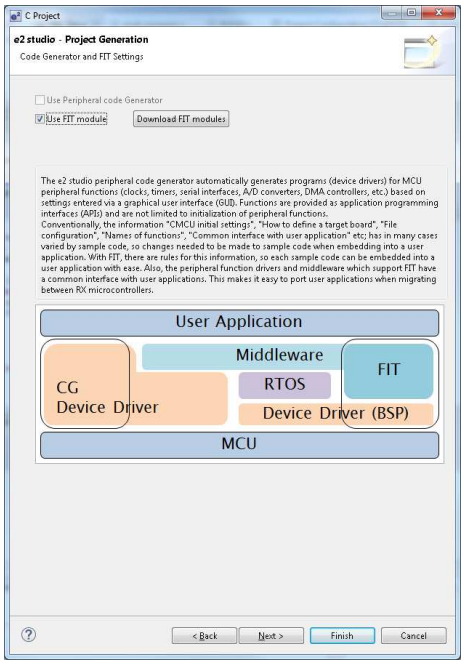
5. What is new in 4.0.1?

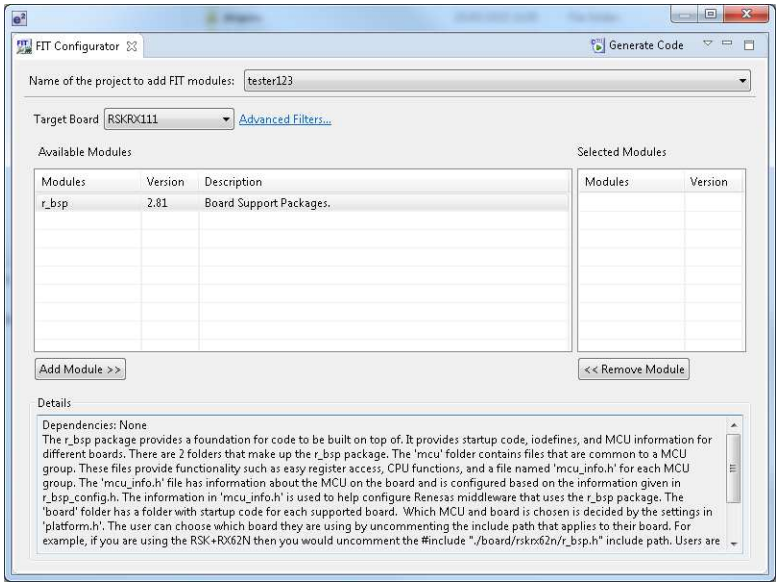
Component	Description
Debugger	e² studio 4.0.1 has support for the new Renesas E2 Lite emulator. This is available by selecting the “E2 Lite (RX)” selection in the Debug hardware drop list in the Debug Configurations dialog. 
Device Support	New RX device support added and updated. New group: RX23T, RX634.
Language Support	Traditional Chinese support added for CDT menus.
Breakpoint	Improved breakpoint setting dialog added to the breakpoints plugin to allow source line breakpoints to be added to a file not currently open.
Project Generator	When adding FIT modules via the project generator it is now easier to find the RX driver package module (RDP) in the FIT module download dialog. Show RX Driver Package Only (Unchecked)  Show RX Driver Package Only (Checked)

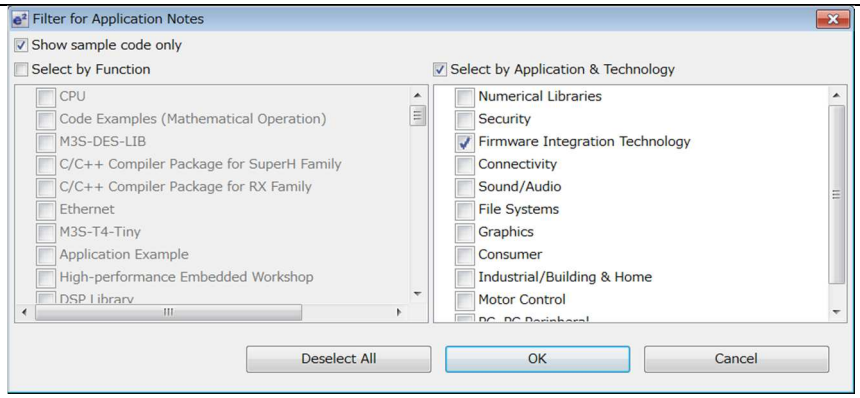
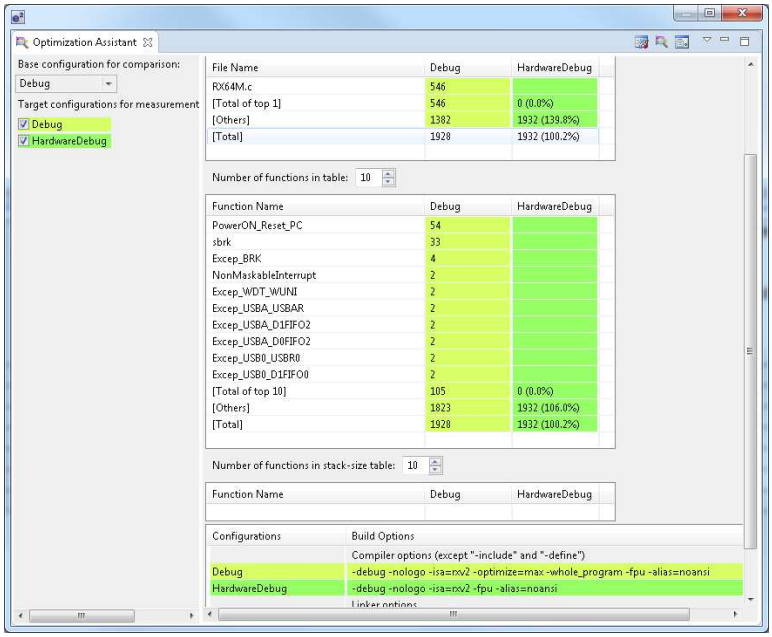
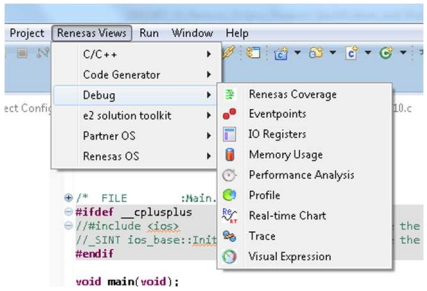
	 FIT Module Download Title Document No. Rev. Issue date RX113 Group RX Driver Package User's Manual R01AN2466EJ01... Rev.1.00 2014/11/28 Filtered: Show RX Driver Package only Select All Deselect All Download Cancel

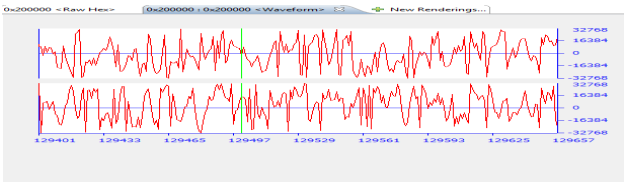
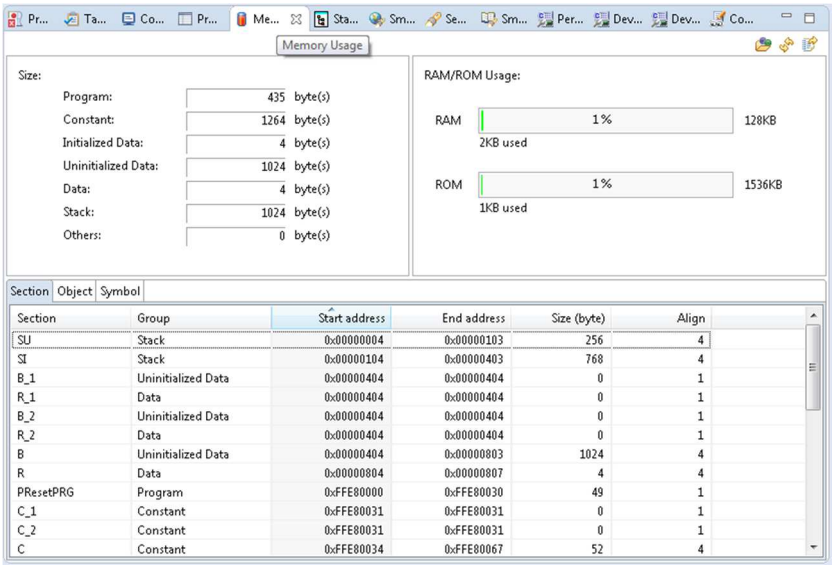
6. What is new in 4.0.0?

Component	Description
Application	e² studio 4.0 has updated Eclipse version to Luna SR2. In addition CDT was updated to 8.6. For a list of added features see below: http://wiki.eclipse.org/CDT/User/NewIn85 http://wiki.eclipse.org/CDT/User/NewIn86
Installer	A new installer has been developed for e² studio 4.0. It enables some improvements : • You can download an installer capable of delivering full product and associated installers for tool chains, etc. in a single install operation. • You can download just the support for the device you want to use, reducing the download time. • The download and installation time has been reduced.
Debugger	Stepping performance has been improved by around 20% across all debugger families.
CCRL Toolchain support	The new Renesas CCRL toolchain is now supported. This toolchain is used to build code for the RL78 device family. 
ARM Debugging	For the ARM Segger J-link debugger we now pass GDB run commands also at reset. This ensures the target board is automatically re-configured after the reset is issued.
RZ	Support for the RZ/T1 has been added to e² studio.
Debugging	Real-time memory has been enhanced to allow shorter memory update intervals and better user feedback if the refresh interval is overflowing. E.g. A memory fetch cannot be performed in the user requested time interval.
Multicore Debugging	e² studio 3.1 supported synchronous multicore debugging for RH850. In version 4.0 asynchronous multicore debugging has also been implemented.

	This is available for configuration on the RH850 debug configuration dialog: 
FIT plugin	Improvements have been made to the FIT plugin and also the project generator to integrate the FIT system more effectively within e² studio. The FIT configurator has also been developed to enhance usability. This can be opened by Renesas Views->e2 solution toolkit->FIT Configurator. Now it is possible to create a FIT project from within the project generator in e² studio.  This page also dynamically links to the Renesas website to download suitable modules for use in the project.

	The FIT plugin has also been enhanced to provide a more user friendly experience to the user.  The FIT configurator has improved features which were missing from the FIT plugin such as: • Adding dependent libraries automatically to the project that the FIT modules need. • When adding a new FIT module, if dependent FIT modules are required you are informed. • A “user” selection has been added to the target board selection control. When this is used the r_bsp module is not added to the project. • Depending on the target board selection the FIT configurator automatically modifies the code to ensure the correct “platform.h” definition. • When the r_bsp is selected the correct target board files are automatically copied by the plugin.
Smart Browser	The smart browser has been enhanced. This release of the tool can import sample source code when downloaded from the Renesas website via the Smart Browser user interface. In addition there are improved filtering options to reduce the scope of the smart browser search results:

	
Optimization Assistant	The optimization assistant has been improved in e² studio 4.0. It now provides the following features in addition to those implement in 3.1. • When using non-Renesas toolchains, clicking Create Configuration shows the manage configurations dialog. • Stack size entry now provided on the dialog. 
Application	A new “Show View” menu has been added to e² studio. This enables quick and easy access to the Renesas views. 
Partner RTOS	Partner OS plugin has been updated to support the Smalight OS and ThreadX.
ARM Debugging	Semi-hosting has been implemented for the ARM debugger so that printf commands can be output in the Renesas Debug Virtual Console.

Waveform plugin	In e² studio 4.0 we have added the function to save the data to wav format file. This allows users to check the sound stored in memory in an external package to make sure it is correct. We have also added the function to read the data from wav format file and display the data.  The waveform plugin can also play audio directly from the waveform view.
Map view plugin	The memory usage plugin will be used to get the map file from the project. This will list out the total memory size, usage of ROM and RAM and detailed information of sections, objects and symbols used in the project. 

Section	Group	Start address	End address	Size (byte)	Align
SU	Stack	0x00000004	0x00000103	256	4
SI	Stack	0x00000104	0x00000403	768	4
B_1	Uninitialized Data	0x00000404	0x00000404	0	1
R_1	Data	0x00000404	0x00000404	0	1
B_2	Uninitialized Data	0x00000404	0x00000404	0	1
R_2	Data	0x00000404	0x00000404	0	1
B	Uninitialized Data	0x00000404	0x00000803	1024	4
R	Data	0x00000804	0x00000807	4	4
PResetPRG	Program	0xFFE80000	0xFFE80030	49	1
C_1	Constant	0xFFE80031	0xFFE80031	0	1
C_2	Constant	0xFFE80031	0xFFE80031	0	1
C	Constant	0xFFE80034	0xFFE80067	52	4

7. Useful workarounds and information for 4.0

ID	Component	Workaround or information
	Application	This version of e² studio is based on Eclipse Luna SR2 and CDT 8.6. This release note does not describe the Eclipse framework and CDT plugin issues and fixes. You can find the detailed information on the sites below: For information on the Luna release see here: https://projects.eclipse.org/releases/luna http://archive.eclipse.org/eclipse/downloads/drops4/R-4.4-201406061215/news/ CDT: https://wiki.eclipse.org/CDT/User/NewIn86 The Eclipse bug tracker is here: https://bugs.eclipse.org/bugs/ The bug list for Luna is available using the following query: https://bugs.eclipse.org/bugs/buglist.cgi?bug_status=RESOLVED&bug_status=VERIFIED&bug_status=CLOSED&classification=Eclipse&list_id=12238007&product=Platform&query_format=advanced&resolution=FIXED&target_milestone=4.4&target_milestone=4.4%20M1&target_milestone=4.4%20M2&target_milestone=4.4%20M3&target_milestone=4.4%20M4&target_milestone=4.4%20M5&target_milestone=4.4%20M6&target_milestone=4.4%20M7&target_milestone=4.4%20RC1&target_milestone=4.4%20RC2&target_milestone=4.4%20RC3&target_milestone=4.4%20RC4&target_milestone=4.4.1&target_milestone=4.4.2 Bug List for CDT is: https://bugs.eclipse.org/bugs/buglist.cgi?bug_status=RESOLVED&bug_status=VERIFIED&bug_status=CLOSED&classification=Tools&list_id=12238014&product=CDT&query_format=advanced&resolution=FIXED&target_milestone=8.5&target_milestone=8.6.0
5954	Application	If you experience the error message “org.eclipse.swt.SWTError: No more handles” this can be caused by certain multi-monitor software and the Eclipse framework. If this error occurs there are 2 workarounds: 1. Use a single monitor display. 2. Uninstall the multiple monitor software from your graphics chipset vendor and revert to the standard Windows multi-monitor feature.
6981	RL78 Debugging	When debugging IAR C source file with an OCD emulator (E1), the Monitor program area (0x00002-0x00003) is used. So this area must be excluded from usable address space. Please add '-HFF' in the linker option. - Open Property. - Select [C/C++ build]-[Settings] at left side. - Select 'IAR RL78 Xlink linker' at right side, add '-HFF' at the textbox 'command'.

		Not doing this will cause problems with connection and download when using interrupts.
NA	ARM Debugging	In e² studio 4.0.1 the RZ/T1 Cortex M3 core is now supported for debugging only. Cortex M3 projects are not available in the project generator so start-up code can only be created for the RZ Cortex R4F core.
NA	Application	If you are experiencing slow building of projects within e² studio there are some possibilities to improve. The system environment will attempt to find the make.exe tool via the system environment. If you ensure the directory make resides in is at the start of the path variable it will find it more quickly. Especially important if there are network drives in the path. In the project properties, C/C++ Build tab, behavior tab you can switch on parallel build. This will take advantage of the multi-cores on your host machine if it has them. In e² studio 2.1 or later this now defaults to on for new projects.
NA	RZ GCC	In 3.0 the KPIT GCC RZ toolchain was support at version 14.01. This version is no longer supported within e² studio. KPIT have modified the name of their ARM toolchain to be ARM-none-eabi to follow standard ARM naming convention like other GCC toolchain vendors. The toolchain is available at version 14.01 and 14.02 from the KPIT website. The binaries in the 14.01 version is identical to that used in the 14.01 RZ toolchain. Once the toolchain is installed your projects will be imported and ported to ensure there is as little disruption as possible due to this change.
NA	GCC Build Plugin	The GNU toolchain linker file format was changed in 3.0. This means projects that are developed in 3.0 or later and opened in 2.x will still continue to build. However you may experience issues visiting the GCC Linker Sections user interface.
5041	Code Generator	Code Generator can delete user code between /* Start */ End comments in some situations. Using the code generator if the following code is placed in the main function: //if(data_in!=0xAA){ On a line by itself, all of the main code will be removed when Generate Code button is pressed. The key issue is that the {brace is on the same line as the comment.
2010	HEW Importer	Symptoms: Project fails to build after import from HEW Conditions: If a long filename or path is used, and the HEW project importer is used, the project may fail to build. Workaround: Move the original HEW project to a shallow directory structure (i.e.) C:\Workspace and import from there. Also ensure that the HEW project is relocated before importing into e² studio.
2421	Debug Configurations	Debug configurations have been modified since e² studio 2.x. So although you can re-use the workspace and projects from e² studio 1.x when you open the debug launch configuration for the first time it is updated. Before doing this you should back-up the .launch file if you need to keep a 1.x version.

NA	Application	It is not possible to import e² studio 1.x projects which are for the V850 device into e² studio 2.0.
1922	Application	Symptoms: Project fails to build in first instance after archive project import (not from HEW) Conditions: If an archived project is imported it may fail to build the first time, due to a residual .d file. Workaround: Clean and Build a second time.
2762	CODAN	When using assembly code within a C source file, Codan errors can be observed in the editor. Even though the project builds successfully. We do not have a workaround for this at this time. On occasion you may also see this for C source files. This is normally a case of the indexer needing to be refreshed. Right click on the project, select Index->Freshen all files. Then right click again select Index-Rebuild. This should solve unexpected CODAN errors in C source files.
2728	GDB	Step into does not always work when using the CCRX 1.02.01 toolchain. To ensure this behaves correctly you will need to use CCRX 2.00.00 or greater as this issue with the debug information is corrected in this release.
NA	Eventpoints	If eventpoints do not always work just after they are set, you can use the "Apply to Target" toolbar button in the Eventpoint view to send the Eventpoints to the target manually. This will always ensure the debugger target has all the required eventpoint updates before execution starts.
5772	IAR Plugins	The IAR Plugin Manager is now included in e² studio. This provides support for RX, RL78, RH850 and RZ (ARM). This is a tool which simplifies installation and configuration of IAR toolchain plugins. You can access this though Help -> IAR Embedded Workbench plugin manager.
5903	Code Generator	For the following RL78 code generator project, "Peripheral Functions" view tabs may not be operated with double-clicking "Peripheral Functions" branch of Project Explorer view. After creating/loading the project, please show "Code Preview" view by double-clicking of "Code preview" branch at Project Explorer tree at first. Then, please access Code Generator setting tabs by double-clicking Project Explorer tree or using pull-down menu by pressing triangle button at the up-right corner of Peripheral Functions view. RL78/G12, RL78/G13, RL78/G14, RL78/G1A, RL78/I1A, RL78/F13, RL78/F14, RL78/F12, RL78/L12
6184	RL78/CCRL debugging	When the load module for RL78/G10 which created at CC-RL is debugged in E1, please specify the following option: [Linker] -> [Device] -> "Set enable/disable on-chip debug by link option

5995	CCRX to GNU RX Converter	When converting from CCRX to GCC projects some comments like //* comment */ are left intact which will result in an error if standard is set to C89. Changing the standard to C99 or above will fix this problem.
6800	RZ/T1 Project Generation	The program which is downloaded to RAM and executes in the RAM does not work well. e2 studio only supports the program which is downloaded to NOR flash or serial flash with the standard generated project.
	RZ/T1 Debugging	The Segger J-Link emulator executes the boot program prepared for RZ/T1 before downloading your user program. This means that your user program will need to be downloaded twice by disconnecting and re-connecting the e2 studio debugger, if the parameters for the loader area were changed or not written correctly on board.
6798	RZ/T1 Debugging	On RZ/T1 devices the CPSR register is shown endian reversed.
7217	Application	The restore default settings does not restore all of the options set during project generation. Instead it sets the defaults to the base settings for the device family in use.

8. Fixed issues in 4.0.2.8

ID	Component	Description
7293	RL78 GCC Build	When RL78/G1D project is generated, it does not add "-mg13" option for it. RL78/G1D is S2 core device.
7260	Application	When deselecting the e2 studio update site from the update site list and closing e2 studio. The update site is removed. This should not happen and should remain available but unchecked.

7208	Code Generator	Code Generator for RX231, RX230
		1. RX231 and RX230 devices more than 100pin have Open Drain setting for PORT J. But, Code Generator doesn't support Open Drain item on PORT GUI. If necessary, please add ODR0 register setting code manually.
		2. RX230 devices have the following pins. But, Code Generator doesn't support items for them. PORT H cannot be set as I/O port and other multiplexed pin function. PH0/CACREF, PH1/IRQ0/TMO0, PH2/IRQ1/TMRI0, PH3/TMCI0.
		3. PinView (Pin List, Top View) is not supported about the following RX231 devices.
		48pin:
		R5F52315CxNE, R5F52316CxNE, R5F52315CxFL, R5F52316CxFL
		64pin:
		R5F52315CxND, R5F52316CxND, R5F52315CxFM, R5F52316CxFM, R5F52315CxLF, R5F52316CxLF
		100pin:
		R5F52315CxLA, R5F52316CxLA, R5F52315CxFP, R5F52316CxFP
		4. At RX231 and RX230. When MTU2 is used with Complementary PWM Mode n, build error occurs because of no macro definition. Please modify the code.
		File: R_MTU2_Create(), r_cg_mtu2.c;
		Error line: MTU3.TCNT = xxxxxxx;
		Modified code: please set the same value for MTU.TDDR register.
		e.g.)
		original code:
		MTU3.TCNT = _00A0_3TCNT_VALUE; // error
		...
		MTU.TDDR = _00A0_TDDR_VALUE;
		modified code:
		MTU3.TCNT = _00A0_TDDR_VALUE;
		...
		MTU.TDDR = _00A0_TDDR_VALUE;

7289	RX GCC Build	When RX23T GNURX project is generated, compiler option "-nofpu" is set and "-mcpu=rx64m" is not set.

9. Fixed issues in 4.0.1.7

ID	Component	Description
5394	CCRX Build plugin	'"Problem"' If a source file folder (already included in C option) is deleted, its path was added to Assemble include. '"Workaround"' Remove the path in "include file directories" will stop the warning.
5826	GDB Server RZ	Using Move to Line with an RZ target can cause the GUI to stop responding. Set the PC directly via the Registers window instead.
6470	Performance Analysis	To acquire the 64 bit value in Performance Analysis View for RX, the following steps will be required: - Start with both timers enabled and all settings the same - Enabled "link timers" for Timer1. - Timer1 and Timer2 are now linked and the 64bit counter is being used.
6531	CCRL Build plugin	In some cases CCRL code is not seen as source code and you cannot set breakpoints on the source line. The issue is the indexer does not understand the "near" keyword and treats it as a syntax error.
6678	GDB server	Removing a previously set breakpoint by double clicking the Line Breakpoint marker at the side of the editor, sometimes does not remove the breakpoint. Disconnecting and re-connecting the debugger does resolve the issue.
6757	Application	CCRX to GNURX: Project Build fails after conversion for RX64M and RX71M targets. User will need to delete the un-used .fvectors and .exvectors sections from the converted projects for targets RX64M and RX71M. The RESETVECT and EXCEPTVECT sections are being used in the application instead of .fvectors and .exvectors.
6798	Application	On RZ/T1 devices the CPSR register is shown endian reversed
6814	Device Support RX	New RX device support added and updated. New group: RX23T, RX634
6853	Application	Creating breakpoints from the Eclipse breakpoint dialog now possible for C/C++ source lines.
6906	CodeGenerator plugin	New code generator support for RL78/G1F and RX23T.
6915	RL78 GCC build plugin	RL78 G10 start-up code incorrect. The HL register used in the BSS initialization routine is not initialized properly. Due to incorrect bank selected while loading the start address of .bss section.
6936	Application	When downloading an IAR project the 0x2 and 0x3 memory areas which are reserved for the on-chip debugger are not protected. In previous versions of e2 studio the debugger would write FF to these values. However this is not correct operation. The side effect for IAR is that this can cause the download to fail when interrupts are enabled. One workaround is to add the -HFF option into IAR RL78 XLink command to set 0xFF for unused address(including 0x03-0x03). Once added this then enables the connection/download to succeed.
6981	Application	When debugging IAR C source file with an OCD emulator (E1), the Monitor program area (0x00002-0x00003) is used.

		So this area must be excluded from usable address space. Please add '-HFF' in the linker option. - Open Property. - Select [C/C++ build]-[Settings] at left side. - Select 'IAR RL78 Xlink linker' at right side, add '-HFF' at the textbox 'command'.
6987	Installer	e2 studio Integration Service and the CCRX to GNU converter are not present when e2 studio 4.0.0 is installed using the installer.
6994	Application	Traditional Chinese language pack support added to the e2 studio installer.
7013	CCRX Build plugin	The linkage order cannot be changed for CCRX projects when they contain more than one virtual folder.
7071	CodeGenerator plugin	If "debug" is enabled in the RL78 GCC code generator, a linker overlap error is generated during build. Please comment out the following code to avoid build error and E1 emulator download error. The following code is unnecessary.) in r_cg_vector_table.c #define OCDRAM_SECT attribute ((section (".ocd_ram"))) uint8_t Ocd_Ram[512] OCDRAM_SECT;
7079	CodeGenerator plugin	When Trace function is used at Code Generator GUI, Code Generator adds 'ocd_traceram' section to linker section. However, the address of section is wrong, it causes the download error to E1 emulator. Please change the address of section 'ocd_traceram' at property after code generation. Target device: RL78/I1D, R5F117xC (x = A, B, G) Wrong address: 0xFE300 Correct address: 0xFF700
7086	Application	During code generator the linker section options are modified. However when the user presses build the linker script file is not re-generated. There is still a limitation in that although the file is re-generated the build is not marked as dirty. So please clean and the rebuild the project.
7098	Integration Server	Help plugins were not installed when certain components were not selected in the installation procedure.

10. Open issues in 4.0.2.8

ID	Component	Description
7103	CCRX Build plugin	'"Problem"' If two or more source file folder (already included in C option) are deleted, its path was added to Assemble include. '"Workaround"' Remove the path in "include file directories" will stop the warning.
7101	Application	When using the RL78 GCC toolchain with a debug configuration for the simulator problems can occur with building once the code has been generated for the first time. rl78-elf-ld: section .option_bytes loaded at [000000c0,000000c3] overlaps section .text loaded at [00000080,0000029b]
7097	Debug Configuration	Large projects may timeout when connecting for the first time. A reconnection will succeed. This can be seen with RZ projects in some situations.
7095	Application	CCRX to GNURX conversion fails for per file build settings in assembly source files.
7092	Application	When using the GNU ARM toolchain the project build fails when 'Dwarf3' option is selected.
7072	GDB Server RZ	When CM3 debugging is started and expand register view to see "misc" register, "_ReadRegIfNecessary(): Register 32 is not marked as valid" error is shown.
7057	Application	When adding an event point to an external source code file. (File added using "Link to file in the file system" option). There can be problems adding the event point in this case.
7011	Project Generation	In some cases the file list displayed in "Project Summary" dialog of the project generator does not match the actually generated files.
7005	Application	Debugging with the RL78 GDB simulator with the IAR project generators is not straight forward. The default IAR debug configuration uses the GDB executable name "GDB". This launch will not work and you need to point it at "rl78-elf-gdb.exe" included in the e2 studio debugcomp directory. However if you have not launched a Renesas debug configuration it won't be present. On the first launch of a Renesas debug configuration for RL78 the file is uncompressed from the package zip file. So to work around you need to launch a RL78 E1 session first so the GDB application for RL78 exists.
6998	GDB Server RZ	Reload on RZ/T does not work well. Modify code on RZ/T project. Build. The code is download but not executed The old code is executed. Press reset button on the hardware and modified code is executed correctly.
6953	GDB Server SH	For SH2a-FPU devices the register view may show incorrect values for the SR register and the MACH\L register
6859	CDT	In some cases after reload symbols are not being updated correctly. Appears to be related to caching with CDT. GDB symbol information is correctly updated, and expressions which directly access fields in structures updated correctly, but overall structures are not correct.

6852	Project Generation	The combination of "C++ project" and "CC-RL" toolchain can be selected. But, "CC-RL" toolchain does not support "C++ project". So, do not select the combination of "C++ project" and "CC-RL" toolchain.
6770	Trace plugin	Loading saved trace data in the trace view when using the RZ/A1 device does not work and shows an error.
6741	CodeGenerator plugin	Code Generator registration needs the administrator privileges. Please start e2 studio once after the installation using an admin account, before using Code Generator on the PC.
6731	CodeGenerator plugin	When changing the "On-chip debug setting" to "Used" for GNU RL78 devices, after clicking Generate code the linker change is not immediately reflected in the build. The .ocd_ram section is not added until the user opens the linker settings and clicks Apply. In some cases this causes a build failure.
6705	GDB Server RZ	Automatically selecting a connected JLink debugger from the debug configuration does not work correctly. The user is still required to manually select from the JLink dialog.
6704	Application	For RZ/T1 target a user can select Profile View. When selecting button 'Turn Profiling On' this is allowed to be enabled although this is not supported.
6701	GDB server	For RX devices, when 'step' command is invoked for WAIT instruction, GDB might report an error. Please use 'resume' command for WAIT instruction instead.
6696	CodeGenerator plugin	'"Problem"' When the configuration which generated code is changed into a different configuration, a build error occurs. '"Workaround"' Please change the address of "FIXEDVECT" section into 0xFFFFFFD0.
6685	Installer	The modify feature for standalone installer does not remember proxy settings.
6676	Application	The "Renesas GDB Hardware Attach" causes a NullPointerException. This results in this feature not being usable.
6674	CodeGenerator plugin	Code Generator doesn't have the property to change the encoding (character code). Code Generator loads/saves the generated source file according to the default encoding of Windows. Therefore, when the comment with the different encoding from the Windows default one is added into the generated file by Code generator, it is not properly encoded and it cannot be displayed properly at the editor.
6657	Coverage plugin	If the workspace is copied or moved from the original folder, coverage information may not be displayed. Please re-build the program in the new workspace.
6616	Event points plugin	When adding a new Data Access eventpoint, the Compare value (on the Data Access Settings tab) is always converted to hex and subsequently displayed in hex even if the value entered does not include an 0x prefix.

6605	Event points plugin	The enable state of eventpoints for any debug configuration is not restored when the debug configuration is launched for the first time after e2 studio is started. In subsequent launches the eventpoints are enabled/disabled appropriately.
6594	Static Analysis plugin	1. Due to the optimization of the compiler, the static function is not sometimes indicated in Static Analysis View. In this case, please select "Debug Precedence" in "Level of optimization". 2. The label indication of static function is different between CC-RX and CC-RL. This difference is due to CCRL and CCRL Compiler spec. <Example> static int function01(int a) {...} CC-RX: function01 CC-RL: fucntion01@1 In case of CC-RL, "@1" string is added to the function label.
6566	Real-time Watch	In some situations the RH850 multicore real-time expression update does not work.
6557	GDB Server RH850	Breakpoints are not always being cleared completely when a breakpoint is removed.
6549	Profile plugin	The Profile View 'Execution Time' and 'Average Execution Time' columns are showing as zero after suspending the current debug session (for all targets).
6545	Profile plugin	No profile data is displayed in the profile view for GNUSH or SHC projects.
6529	CDT	After restart on occasion the disassembly window can be empty. Refreshing the window or stepping works around the problem.
6525	Trace plugin	The Trace View does not show disassembly when tracing through code in a memory area not in the download module.
6484	Application	Additional build tabs contributed by other third party tools can be hidden by e2 studio. This is caused by Renesas/KPIT build plugins replacing the standard build settings page with a custom one.
6463	Application	Memory view requires manual refresh to see changes when downloading auxiliary file.
6450	Application	When "Prevent debugger from re-writing on-chip Program ROM" is checked and "Force Hardware Breakpoints" is set to No setting breakpoint fails and the program will not execute.
6408	Application	When User boot mode is selected at the setting for Mode pin in CPU Operating Mode, the warning for USB boot program is displayed even if the device does not have USB boot program. Please click 'yes' if the device does not have USB boot program.
6394	GDB server RX	Trace Record event point does not filter correctly with Segger RX63N.

6350	Application	NullPointerException is observed when adding a custom configuration and selecting the same configuration within the “Multiple Configuration” selection at the same time. This issue only occurs if user has not applied after creating new config: https://bugs.eclipse.org/bugs/show_bug.cgi?id=352047
6336	Application	Start / Stop Function Settings are sent once on connecting. If the address for start function or stop function is changed by building the program, please disconnect from target and reconnect again.
6208	Application	When debugging with RX there are problems with setting breakpoints when the hardware breakpoint resources have been exhausted and the software breakpoint setting also fails. In this case the breakpoint appears to be valid but the debugger will not stop. This can often be seen when the option "Program re-writes internal Data Flash" is set to yes. As this means software breakpoints cannot be set.
5911	DS-5 importer	The current DS-5 importer in e2 studio imports KPIT GNU "Application" project types only. Other projects cannot be imported at this time.
5903	CodeGenerator plugin	For the following RL78 code generator project, "Peripheral Functions" view tabs may not be operated with double-clicking "Peripheral Functions" branch of Project Explorer view. After creating/loading the project, please show "Code Preview" view by double-clicking of "Code preview" branch at Project Explorer tree at first. Then, please access Code Generator setting tabs by double-clicking Project Explorer tree or using pull-down menu by pressing triangle button at the up-right corner of Peripheral Functions view. RL78/G12, RL78/G13, RL78/G14, RL78/G1A, RL78/I1A, RL78/F13, RL78/F14, RL78/F12, RL78/L12
5778	Debug Configuration	When importing a project and debugging before visiting the debug configuration the debug connection will fail. Visiting the debug configuration or creating a new project uncompressed the support files. Once this has happened debug connection can continue as normal.
5770	Application	RX targets and IO registers greater than 1 byte. e.g. winA 0x88028 winB 0x8802a View register in both IO view and register view. Value in memory view is reversed. This is because the IO, (like all RX memory for little endian targets is reversed).
5721	CDT	When modifying code that changes the line an already set breakpoint is located at the breakpoint is not moved according to the modification.
5669	Application	An invisible breakpoint is left in the project following a ‘Move To Line' operation. Program execution continues to halt at this location once the Move to Line operation has been performed.

5668	Coverage plugin	In some cases when using the Coverage facility with the RL78 IECUBE some lines are shown as 'branch' or partial coverage when they should be 100% covered.
5637	Multicore	For RH850 multicore devices, disassembly result may be different from the expected. In this case, please refresh the view after changing the debug context to the other PE.
5632	Multicore	When using multicore projects the Debug View may show an incorrect name for the second loaded module (as a duplicate of the first)
5551	Application	If the maximum number of break points are used for RX with E1/E20 emulator, the connection or the program execution may fail. In this case, please reduce the using break points.
5547	Application	To use the data access events as trace start, trace stop or trace record for RH850 with E1 emulator, please do not use the "Compare Settings" condition for the event.
5530	Application	Indexer settings are not persisted on a project import into e2 studio.
5467	Memory View plugin	Settings in the 'Format' dialog (Memory view) are not restored.
5290	CCRX Build plugin	When you add a new configuration, please do not specify 'Default Configuration' as a configuration used as a base. If you specify the 'Default Configuration', the configuration which does not operate correctly is created.
5201	Application	If you create a project and debug session for a GDB simulator before executing a hardware debug session it will fail. This is because the debugger support is not unpacked until a hardware debug session is used. To work around setup and launch a hardware debug session. You do not actually need hardware to do this.
5179	CubeSuite+ importer/exporter	When CubeSuite+ project imports to e2 studio, Build cannot perform sometimes. [Workaround] Please add the <root folder> to "C/C++ General -> Paths and Symbol -> Source Location"
5171	CCRX Build plugin	Files included in the Pre-include build options are not analyzed for the pre-processor statement in the editor. This can give the impression that code is not included in the build when it is.
5124	Application	Active configuration lost while importing project (which is exported as file system).
5110	GDB	For some RX devices the default display of PSW the IPL is displayed wrong. The MSB is not shown.
5083	CubeSuite+ importer/exporter	Folder level options are not converted correctly
5063	Application	Dependency scanning is not working for assembler file. This is for GCC build plugins.
5056	GDB server RX	Timestamp setting on the Trace view has no effect on results for Profile view for RX devices.

5041	CodeGenerator plugin	Code Generator can delete user code between /* Start */ End comments in some situations. Using the code generator if the following code is placed in the main function: //if(data_in!=0xAA){ on a line by itself, all of the main code will be removed when Generate Code button is pressed. The key issue is that the { brace is on the same line as the comment.
4876	Application	When debugging with RX, if the settings are in flash write mode, the debugger features should be disabled.
4869	Memory View plugin	The "Memory" view always opened on launch of a debug session. It should not be re-opened on launch if it has been closed in the previous debug session.
4819	CCRX Build plugin	Individual compile is not execute when Level2 is specified at the "Perform inter-module optimization".
4783	Performance Analysis	The option to Reset timer before each run, which is setup on the "Performance Analysis" dialog box is not reflected for RL78. The specification for RL78 is that the values are reset all of the time so the option has no meaning.
4607	GDB server	When sub menu "Add Watchpoint" is performed from a Memory view, it seems to have been registered correctly in the Breakpoints view even if there is an error condition. An error occurs by "Add Watchpoint", when the maximum number of events was exceeded, or when a ROM area is specified.
4597	Application	In some cases when a before PC eventpoint is set just after a break point, the program execution will not stop at the address the eventpoint is located at.
4515	CCRX Build plugin	When building projects with CCRX that are in deep directory structures it is possible to experience build issues. e2 studio is unable to build projects which create command lines greater than 8191 characters.
4492	Application	The Module View of e2 studio does not display any information when an executable which includes debug information was downloaded to the target.
4450	CCRX Build plugin	Linker section settings of Renesas toolchain are not getting saved for multiple configurations.
4422	Application	When debugging a project that has been imported but that has not been rebuilt you need to setup the debugger to look in the original source file location. This is done via the Source tab of the Debug Configurations dialog.
4350	CubeSuite+ importer/exporter	When importing a project from CubeSuite+ to e2 studio the “toolchain version is changed" dialog is always displayed. This is because the version string in imported project file and the toolchain information in e2 studio does not match. Ignoring this dialog and continuing should result in a successful import.
4314	GDB Server SH	For the SH debugger the Debug Tool Settings -> Use User Stack option is not processed by the debugger. The setting is not used.

4303	RL78 GCC build plugin	When the project has a toolchain that does not match the path for the toolchain installed on the machine problems with build can occur. Workaround is to delete the 'org.eclipse.cdt.core.prefs' file from .settings folder and then import the project. Alternatively you can modify the toolchain path from Properties > C/C++ Build > Environment. Modifying the toolchain path builds the project successfully.
4191	GDB server RX	When using Segger JLink, with the "Force Hardware Breakpoints" debug option enabled, adding more than the maximum amount of breakpoints for a device and then removing some can lead to none of the breakpoints firing. Workaround is to add a single breakpoint back in to trigger the reapply of all others.
4189	Project Generation	It is not possible to build project which has more than 98 characters in its project name.
4105	Application	When using GCC on Japanese Windows. If you create a new workspace on the desktop the default GCC projects fail to build correctly.
4104	Application	When the project is re-named. If the user then uses the feature project > Build Configurations > Build All. The active configuration builds successfully but subsequent configurations fail.
3992	Application	When importing projects from HEW into e2 studio when the files are read only, build errors occur following import. Ensure the files are writable.
3950	Application	Breakpoints cannot be unset within the editor when code is #ifdef out. These breakpoints will need to be removed from the breakpoints plugin.
3945	Application	When importing a HEW project if it contains folders with the same name at the same hierarchy then not all the files will import successfully. i.e. "....\WorkSpace\WorkSpace\Developments\src\embOS\Util\MEASUREMENT.c" "....\WorkSpace\WorkSpace\Developments\src\protocols\util\SerialUtil.c"
3928	CCRX Build plugin	By default the e2 studio editor character code is set to UTF-8. This means it is possible to enter characters that are then not supported by default by the CCRX toolchain. CCRX default input is SJIS. To enable UTF-8 for the toolchain you must first select C99 support.
3836	Application	Dependencies with file name that have spaces may cause dependency scanning issues. Where possible it is better to avoid using spaces in dependency file names.
3813	Event points plugin	OA event break event points not breaking at correct addresses on SH7203 (External Flash) target.
3804	Application	The code generator is not automatically registered when installing into generic Eclipse. Browse to the CG plugin and then run the batch files that reside in the tools directory. e.g.

		C:\Renesas\e2_studio\eclipse\plugins\com.renesas.cg_1.0.0.201309061659\CodeGenerator\Tools
3663	Application	With 2 targets connected, clicking between the two debug contexts in the Debug View will update the source addresses in the open Editor files. However changing debug context does not seem to get detected if clicking on the top-level of the debug context rather than on the lower level.
3626	Trace plugin	Snapshot trace - adding IO register eventpoints increases the data shown in the trace view, but as they were removed there was no change in the data shown.
3585	Application	The GDB server crashes when an E1 emulator is connected to a debug configuration configured for the Segger emulator.
3550	Application	Custom placeholders are not expanded when importing a project from HEW. This is currently expected behaviour but may be improved in a future version.
3526	Profile plugin	In some cases when using RX with the CCRX compiler the profile view does not display the source file name and path in the window.
3470	Application	When debugging with the RX210 the FPSW register is displayed on the register view. This should not be the case as the RX210 does not have the FPSW register.
3389	Application	When debugging files with the same name show source addresses even though it may not be correct for the file in question. The full file path is not considered just the filename and current debug context. This can lead to e2 studio showing addresses unnecessarily.
2910	GDB	Registers do not display properly on SH2A 72691.
2859	CDT	When using IAR projects the SFR names (e.g. PIOR1_bit.no1) are not understood correctly in the editor.
2762	Application	When using assembly code within a C source file, Codan errors can be observed in the editor. Even though the project builds successfully.
2716	GDB server RL78	Before PC events on IECube temporarily hard coded limit of 4.
2693	Application	HEW Importer, output file (.P/.PP) is not generated while building the project. Workaround: User will need to select Settings -> Compiler -> Object -> output file type -> Preprocessed source file -> OK after importing the project and then build the project.
2537	Performance Analysis	Performance Analysis: Performance time is not updating following changes to start and stop performance addresses. For the G13 IEcube it supports one run/break timer. Currently e2 studio is setting the support to 3.
2486	Profile plugin	Acquiring profile results can take a very long time following RX Simulator debugging.
2416	Project Generation	Use of duplicate register is allowed for RXC project generation. 1. Create RXC project 2. Go to RXC Global option page, select "ROM" -> "R8" 3. Select the same value for any other register (e.g. "RAM" -> "R8"), it gives error message and prevents the user from project creation.

		4. Now select "R8" again for "RAM" register. It doesn't show any error message and allows user to create the project.
2299	RX GCC build plugin	It is possible for .c and .C files to be treated in the same manner in certain situations which is not correct. (.C extension is changed to .c during project build).
2081	Application	After building a project if user changes anything in linker subcommand file option, only ObjCopy is gets invoked. Linker should get invoked.
2010	HEW Project Converter	HEW Project Import fails to build file due to File or path name too long. This is due to the difference between HEW and Eclipse. In HEW object files are output to the configuration directory. In Eclipse the files are output alongside the source file in the same directory.
1982	RX GCC build plugin	For Renesas CCRX the Converter phase gets invoked even when using the external linker subcommand option. This should not happen.
1950	HEW Project Converter	A user tries to import a already imported project (in a different workspace) again. However the project is deleted from the previous workspace. This results in the following error message "The selected .hwp file overlaps the location of another project". See attached dialog. This is because when the project is removed from the project tree the Eclipse projects are not physically removed. Deleting the Eclipse project files from the directory allows the operation to continue.
1889	Application	Due to file extension issue with .s and .S and due to known bug, e2studio users wont be able to use .s or .S effectively to pre-process assembly files that need GCC. Hence we suggest renaming these files to use: .S -> .asm .s -> .src
1859	GDB server	Program execution stops inside a range when Range Exclusive is specified in the address settings for OA event points.
1808	HEW Project Converter	Import a HEW RX project in e2studio using the HEW project importer. Check: Project > Properties > Compiler > Source > Include file directories. Paths are duplicated
1778	Application	When setting the 'Internal Flash Memory Overwrite' debug option, it is possible to exceed the maximum number of non-continuous memory blocks supported. No warning is given if this limit is exceeded. When setting this option ensure the limit (16 for RX devices) is not exceeded.
1645	Event points plugin	For the SH7216 target (and most likely other targets), when using the address conditions and associated mask, the boolean parameter (parameter 17) 'address mask compare type' is not being set to true.

1642	Application	Erase flash on startup option on RL78 should be executed once. When e2studio connects successfully to RL78 target and erases the flash, this option should return to false, so that flashing is not done everytime target is connected.
1640	Application	After creation a project cannot be deleted straight away. If the user waits around 30 seconds the project can then be deleted.
1616	RX GCC build plugin	The options of a Build Configuration were not correct after specifying Multiple Configurations... functionality.
1486	Application	Breakpoint properties do not work when set in the CDT dialogs. For example using the filter operation and removing the breakpoint for the process being debugged.
987	Application	Exporting project if linker sections are modified and not saved generates an error. Resource not synchronized is the message.
874	Event points plugin	Execution Address Eventpoints with trigger count do not work with Breakpoints on Segger RX. Setting an execution address eventpoint with a trigger count on Segger JLink RX62N is not possible if any breakpoints exist, including the default at main. If an execution address eventpoint with a trigger count is set with a breakpoint both the eventpoint & the breakpoint do not function. Multiple breakpoints are set then only 1 does not work. Additional eventpoints function as normal.