

To our customers,

Old Company Name in Catalogs and Other Documents

On April 1st, 2010, NEC Electronics Corporation merged with Renesas Technology Corporation, and Renesas Electronics Corporation took over all the business of both companies. Therefore, although the old company name remains in this document, it is a valid Renesas Electronics document. We appreciate your understanding.

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Renesas Electronics Corporation

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RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-H8*-A415A/E	Rev.	1.00
Title	An amendment to the H8S/2472 Group, H8S/2463 Group, H8S/2462 Group Hardware Manual		Information Category	Technical Notification		
Applicable Product	H8S/2472, 2463, 2462 Group	Lot No.	Reference Document	H8S/2472 Group, H8S/2463 Group, H8S/2462 Group Hardware Manual Rev.2.00 REJ09B0403-0200		
		All Lots				

We would like to inform you about the amendment to the H8S/2472 Group, H8S/2463 Group, H8S/2462 Group Hardware Manual

Section 3 MCU Operating Modes

3.3 Operating Mode Descriptions

3.3.1 MODE 2

[Error]

- Multiplex extended mode

When 8-bit bus is specified, port 1 functions as the port for address output and data input/output regardless of the setting of the data direction register (DDR). Ports 2 (P23 to P20) and 4 (P47 to P44) can be used as a general port.

When 16-bit bus is specified, ports 1, 2 (P23 to P20), and 4 (P47 to P44) function as the port for address output and data input/output regardless of the setting of the data direction register (DDR).

[Correct]

- Multiplex extended mode

When 8-bit bus is specified, **port 2 (P23 to P20), and 4 (P47 to P44)** functions as the port for address output and data input/output regardless of the setting of the data direction register (DDR). **Ports 1** can be used as a general port.

When 16-bit bus is specified, ports 1, 2 (P23 to P20), and 4 (P47 to P44) function as the port for address output and data input/output regardless of the setting of the data direction register (DDR).

Section 6. Bus Controller (BSC)

6.5 Bus Interface

6.5.1 Data Size and Data Alignment

[Error]

(1) 8-Bit Access Space

Figure 6.3 illustrates data alignment control for the 8-bit access space. With the 8-bit access space, the upper data bus (D15 to D8) is always used for accesses. The amount of data that can be accessed at one time is one byte: a word access is performed as two byte accesses, and a longword access, as four byte accesses.

The lower data bus (AD7 to AD0) is used in address-data multiplex extended mode.

[Correct]

(1) 8-Bit Access Space

Figure 6.3 illustrates data alignment control for the 8-bit access space. With the 8-bit access space, the upper data bus (D15 to D8) is always used for accesses. The amount of data that can be accessed at one time is one byte: a word access is performed as two byte accesses, and a longword access, as four byte accesses.

The upper data bus (AD15 to AD8) is used in address-data multiplex extended mode.

Section 6. Bus Controller (BSC)

6.5 Bus Interface

6.5.2 Valid Strokes

[Error]

Table 6.13 Data Buses Used and Valid Strokes

Area	Access Size	Read/Write	Address	Valid Strobe	Upper Data Bus (D15 to D8/AD15 to AD8)	Lower Data Bus (D7 to D0/AD7 to AD0)
8-bit access space	Byte	Read		\overline{RD}	Valid	Ports or others
		Write		\overline{HWR}		
8-bit access space (in address-data multiplex extended mode)	Byte	Read		\overline{RD}	Ports or others	Valid
		Write		\overline{HWR}		
16-bit access space	Byte	Read	Even	\overline{RD}	Valid	Invalid
			Odd		Invalid	Valid
		Write	Even	\overline{HWR}	Valid	Undefined
			Odd	\overline{LWR}	Undefined	Valid
Word	Read		\overline{RD}	Valid	Valid	
	Write		$\overline{HWR, LWR}$			

[Correct]

Table 6.13 Data Buses Used and Valid Strokes

Area	Access Size	Read/Write	Address	Valid Strobe	Upper Data Bus (D15 to D8/AD15 to AD8)	Lower Data Bus (D7 to D0/AD7 to AD0)
8-bit access space	Byte	Read		\overline{RD}	Valid	Ports or others
		Write		\overline{HWR}		
8-bit access space (in address-data multiplex extended mode)	Byte	Read		\overline{RD}	Valid	Ports or others
		Write		\overline{HWR}		
16-bit access space	Byte	Read	Even	\overline{RD}	Valid	Invalid
			Odd		Invalid	Valid
		Write	Even	\overline{HWR}	Valid	Undefined
			Odd	\overline{LWR}	Undefined	Valid
Word	Read		\overline{RD}	Valid	Valid	
	Write		$\overline{HWR, LWR}$			

Section 6. Bus Controller (BSC)

6.5 Bus Interface

6.5.5 Basic Operation Timing in Address-Data Multiplex Extended Mode

[Error]

- (1) 8-Bit, 2-State Data Access Space

Figures 6.16 and 6.17 show the bus timing for an 8-bit, 2-state access space. When an 8-bit access space is accessed, the lower half (AD7 to AD0) of the data bus is used. Wait states cannot be inserted.

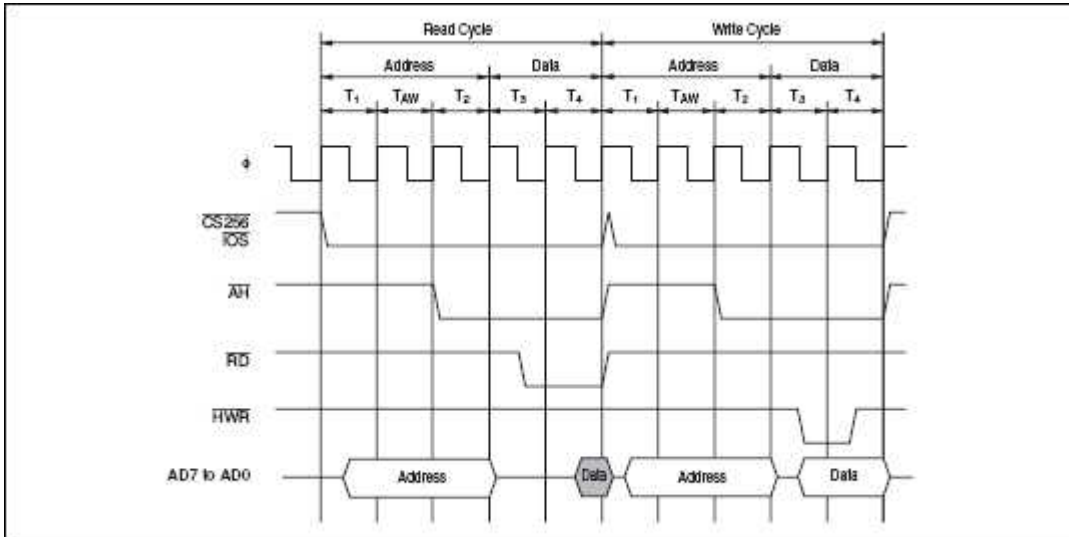


Figure 6.16 Bus Timing for 8-Bit, 2-State Access Space

[Correct]

- (1) 8-Bit, 2-State Data Access Space

Figures 6.16 and 6.17 show the bus timing for an 8-bit, 2-state access space. When an 8-bit access space is accessed, the upper half (AD15 to AD8) of the data bus is used. Wait states cannot be inserted.

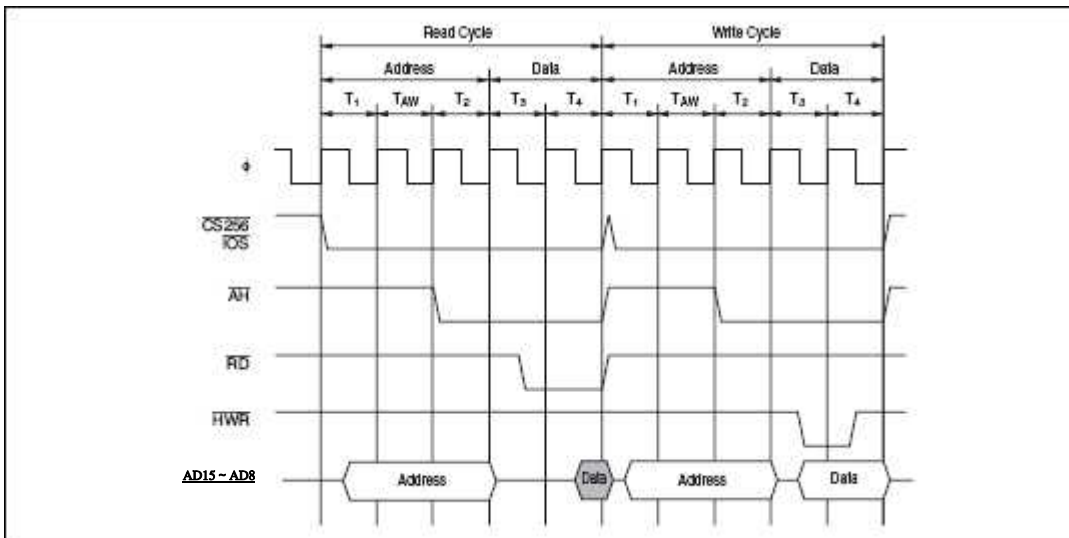


Figure 6.16 Bus Timing for 8-Bit, 2-State Access Space

Section 6. Bus Controller (BSC)

6.5 Bus Interface

6.5.5 Basic Operation Timing in Address-Data Multiplex Extended Mode

[Error]

- (1) 8-Bit, 2-State Data Access Space

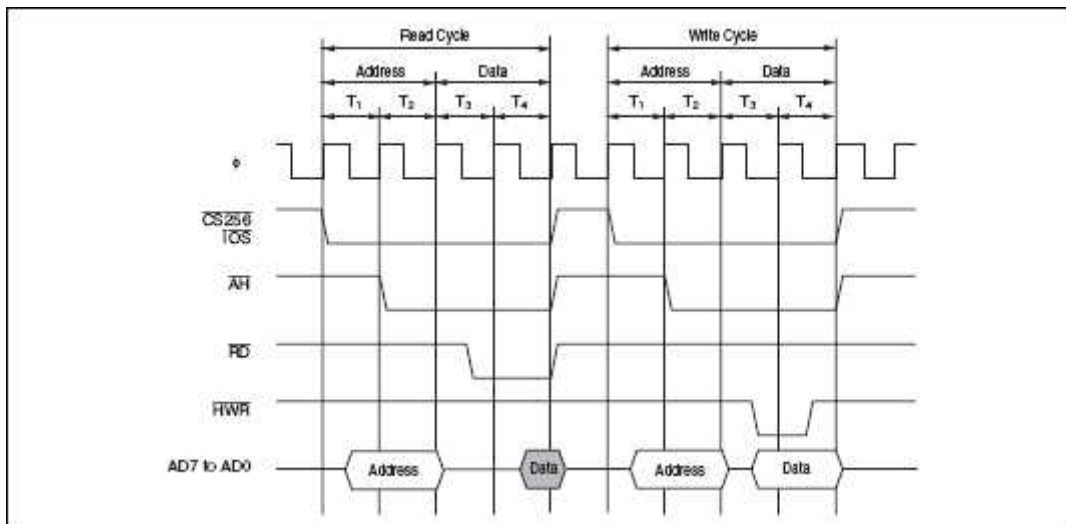


Figure 6.17 Bus Timing for 8-Bit, 2-State Access Space

[Correct]

- (1) 8-Bit, 2-State Data Access Space

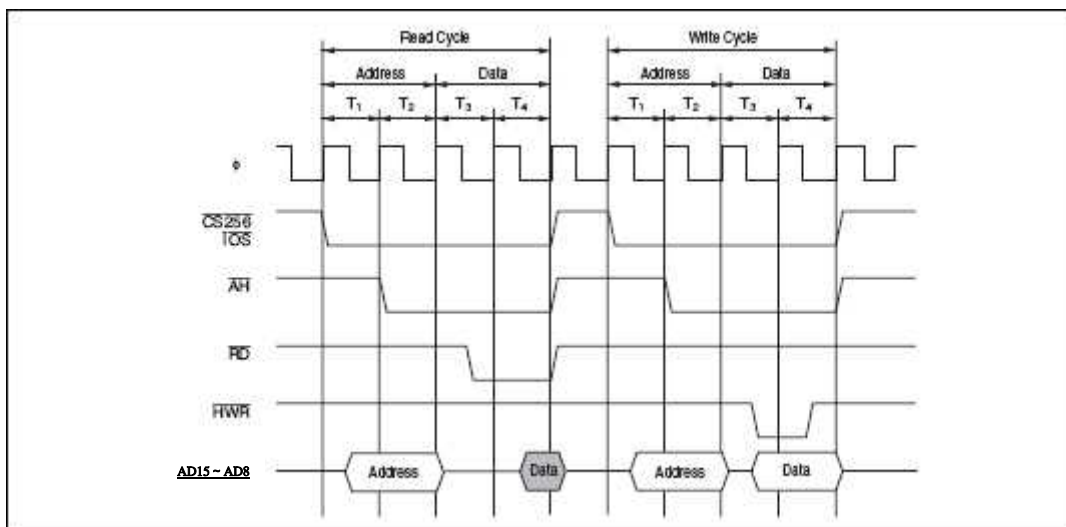


Figure 6.17 Bus Timing for 8-Bit, 2-State Access Space

Section 6. Bus Controller (BSC)

6.5 Bus Interface

6.5.5 Basic Operation Timing in Address-Data Multiplex Extended Mode

[Error]

(2) 8-Bit, 3-State Data Access Space

Figure 6.18 shows the bus timing for an 8-bit, 3-state access space. When an 8-bit access space is accessed, the lower half (AD7 to AD0) of the data bus is used. Wait states can be inserted.

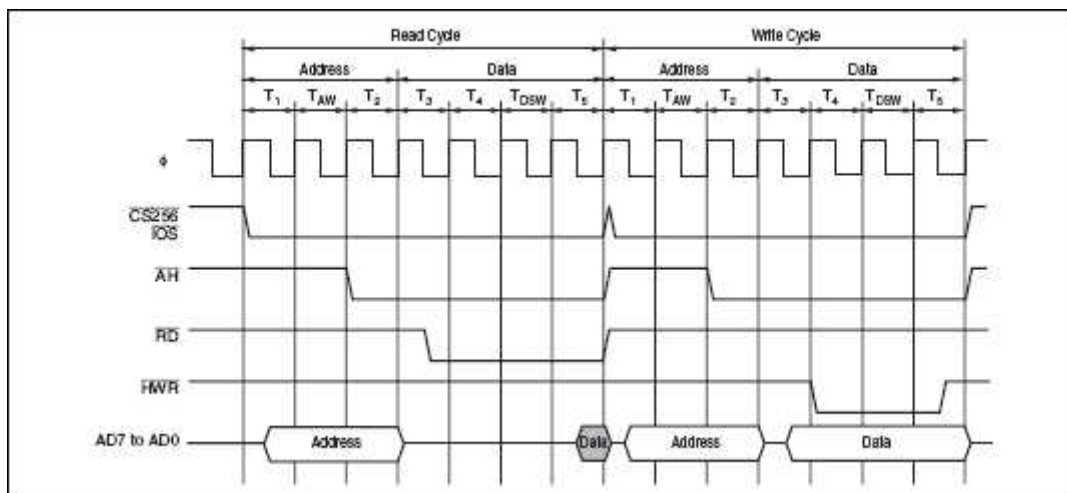


Figure 6.18 Bus Timing for 8-Bit, 3-State Access Space

[Correct]

(2) 8-Bit, 3-State Data Access Space

Figure 6.18 shows the bus timing for an 8-bit, 3-state access space. When an 8-bit access space is accessed, the upper half (AD15 to AD8) of the data bus is used. Wait states can be inserted.

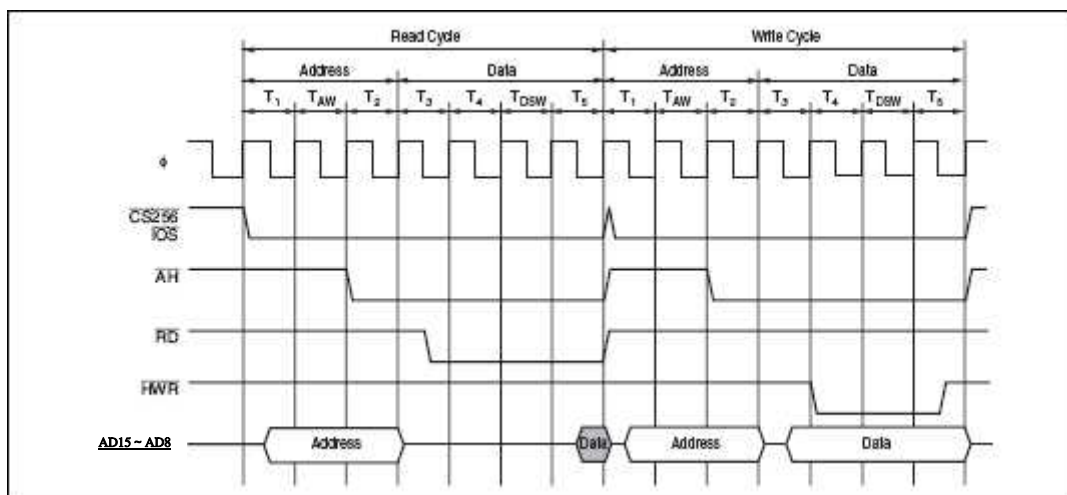


Figure 6.18 Bus Timing for 8-Bit, 3-State Access Space

Section 26. Boundary Scan (JTAG)

26.3 Register Descriptions

26.3.3 Boundary Scan Register (SDBSR)

Table 26.3 Correspondence between Pins and Boundary Scan Register (H8S/2472 Group)

Pin No.	Pin Name	[Error]		[Correct]		Pin No.	Pin Name	[Error]		[Correct]	
		Input/Output	Bit No.	Input/Output	Bit No.			Input/Output	Bit No.	Input/Output	Bit No.
			from ETDI			E3	PF6	Input	329	Input	334
								Enable	328	Enable	333
								Output	327	Output	332
A1	VCC	-	-	-	-	E2	NMI	Input	326	Input	331
		-	-	-	-			-	-	-	-
		-	-	-	-			-	-	-	-
C3	P45	Input	345	Input	350	E1	STBY	-	-	-	-
		Enable	344	Enable	349			-	-	-	-
		Output	343	Output	348			-	-	-	-
B1	P46	Input	342	Input	347	F4	NC	-	-	-	-
		Enable	341	Enable	346			-	-	-	-
		Output	340	Output	345			-	-	-	-
C2	P47	Input	339	Input	344	F3	VCL	-	-	-	-
		Enable	338	Enable	343			-	-	-	-
		Output	337	Output	342			-	-	-	-
D3	P56	Input	336	Input	341	F1	MD2	Input	325	Input	330
		Enable	335	Enable	340			-	-	-	-
		Output	334	Output	339			-	-	-	-
C1	P57	Input	333	Input	338	F2	P51	Input	324	Input	329
		Enable	332	Enable	337			Enable	323	Enable	328
		Output	331	Output	336			Output	322	Output	327
D2	VSS	-	-	-	-	G4	P50	Input	321	Input	326
		-	-	-	-			Enable	320	Enable	325
		-	-	-	-			Output	319	Output	324
E4	RES	Input	330	Input	335	G3	P97	Input	318	Input	323
		-	-	-	-			Enable	317	Enable	322
		-	-	-	-			Output	316	Output	321
D1	MD1	-	-	-	-	G1	P96	Input	315	Input	320
		-	-	-	-			Enable	314	Enable	319
		-	-	-	-			Output	313	Output	318

Pin No.	Pin Name	[Error]		[Correct]		Pin No.	Pin Name	[Error]		[Correct]	
		Input/Output	Bit No.	Input/Output	Bit No.			Input/Output	Bit No.	Input/Output	Bit No.
G2	P95	Input	312	Input	317	K3	PC5	Input	288	Input	293
		Enable	311	Enable	316			Enable	287	Enable	292
		Output	310	Output	315			Output	286	Output	291
H4	P94	Input	309	Input	314	K1	PC4	Input	285	Input	290
		Enable	308	Enable	313			Enable	284	Enable	289
		Output	307	Output	312			Output	283	Output	288
H3	P93	Input	306	Input	311	K2	PC3	Input	282	Input	287
		Enable	305	Enable	310			Enable	281	Enable	286
		Output	304	Output	309			Output	280	Output	285
H1	NC	-	-	-	-	L3	NC	-	-	-	-
		-	-	-	-			-	-	-	-
		-	-	-	-			-	-	-	-
H2	P92	Input	303	Input	308	L1	PC2	Input	279	Input	284
		Enable	302	Enable	307			Enable	278	Enable	283
		Output	301	Output	306			Output	277	Output	282
J4	P91	Input	300	Input	305	L2	NC	-	-	-	-
		Enable	299	Enable	304			-	-	-	-
		Output	298	Output	303			-	-	-	-
J3	P90	Input	297	Input	302	L4	PC1	Input	276	Input	281
		Enable	296	Enable	301			Enable	275	Enable	280
		Output	295	Output	300			Output	274	Output	279
J1	NC	-	-	-	-	M1	NC	-	-	-	-
		-	-	-	-			-	-	-	-
		-	-	-	-			-	-	-	-
J2	PC7	Input	294	Input	299	M2	PC0	Input	273	Input	278
		Enable	293	Enable	298			Enable	272	Enable	277
		Output	292	Output	297			Output	271	Output	276
K4	PC6	Input	291	Input	296	M3	PA7	Input	270	Input	275
		Enable	290	Enable	295			Enable	269	Enable	274
		Output	289	Output	294			Output	268	Output	273

		[Error]		[Correct]				[Error]		[Correct]	
Pin No.	Pin Name	Input/Output	Bit No.	Input/Output	Bit No.	Pin No.	Pin Name	Input/Output	Bit No.	Input/Output	Bit No.
N1	PA6	Input	267	Input	272	R3	PA0	Input	249	Input	254
		Enable	266	Enable	271			Enable	248	Enable	253
		Output	265	Output	270			Output	247	Output	252
M4	PA5	Input	264	Input	269	P4	NC	-	-	-	-
		Enable	263	Enable	268			-	-	-	-
		Output	262	Output	267			-	-	-	-
N2	VCC	-	-	-	-	M5	VSS	-	-	-	-
		-	-	-	-			-	-	-	-
		-	-	-	-			-	-	-	-
P1	PA4	Input	261	Input	266	R4	NC	-	-	-	-
		Enable	260	Enable	265			-	-	-	-
		Output	259	Output	264			-	-	-	-
P2	PA3	Input	258	Input	263	N5	P87	Input	246	Input	251
		Enable	257	Enable	262			Enable	245	Enable	250
		Output	256	Output	261			Output	244	Output	249
R1	NC	-	-	-	-	P5	P86	Input	243	Input	248
		-	-	-	-			Enable	242	Enable	247
		-	-	-	-			Output	241	Output	246
N3	PA2	Input	255	Input	260	R5	P85	Input	240	Input	245
		Enable	254	Enable	259			Enable	239	Enable	244
		Output	253	Output	258			Output	238	Output	243
R2	NC	-	-	-	-	M6	P84	Input	237	Input	242
		-	-	-	-			Enable	236	Enable	241
		-	-	-	-			Output	235	Output	240
P3	PA1	Input	252	Input	257	N6	P83	Input	234	Input	239
		Enable	251	Enable	256			Enable	233	Enable	238
		Output	250	Output	255			Output	232	Output	237
N4	NC	-	-	-	-	R6	P82	Input	231	Input	236
		-	-	-	-			Enable	230	Enable	235
		-	-	-	-			Output	229	Output	244

		[Error]		[Correct]				[Error]		[Correct]	
Pin No.	Pin Name	Input/Output	Bit No.	Input/Output	Bit No.	Pin No.	Pin Name	Input/Output	Bit No.	Input/Output	Bit No.
P6	P81	Input	228	Input	233	N9	PE1	Input	204	Input	209
		Enable	227	Enable	232			Enable	203	Enable	208
		Output	226	Output	231			Output	202	Output	207
M7	P80	Input	225	Input	230	R9	PE0	Input	201	Input	206
		Enable	224	Enable	229			Enable	200	Enable	205
		Output	223	Output	228			Output	199	Output	204
N7	NC	-	-	-	-	P9	VCC	-	-	-	-
		-	-	-	-			-	-	-	-
		-	-	-	-			-	-	-	-
R7	PE7	Input	222	Input	227	M10	PD7	Input	198	Input	203
		Enable	221	Enable	226			Enable	197	Enable	202
		Output	220	Output	225			Output	196	Output	201
P7	NC	-	-	-	-	N10	PD6	Input	195	Input	200
		-	-	-	-			Enable	194	Enable	199
		-	-	-	-			Output	193	Output	198
M8	PE6	Input	219	Input	224	R10	PD5	Input	192	Input	197
		Enable	218	Enable	223			Enable	191	Enable	196
		Output	217	Output	222			Output	190	Output	195
N8	PE5	Input	216	Input	221	P10	PD4	Input	189	Input	194
		Enable	215	Enable	220			Enable	188	Enable	193
		Output	214	Output	219			Output	187	Output	192
R8	PE4	Input	213	Input	218	N11	PD3	Input	186	Input	191
		Enable	212	Enable	217			Enable	185	Enable	190
		Output	211	Output	216			Output	184	Output	189
P8	PE3	Input	210	Input	215	R11	PD2	Input	183	Input	188
		Enable	209	Enable	214			Enable	182	Enable	187
		Output	208	Output	213			Output	181	Output	186
M9	PE2	Input	207	Input	212	P11	PD1	Input	180	Input	185
		Enable	206	Enable	211			Enable	179	Enable	184
		Output	205	Output	210			Output	178	Output	183

Pin No.	Pin Name	[Error]		[Correct]		Pin No.	Pin Name	[Error]		[Correct]	
		Input/Output	Bit No.	Input/Output	Bit No.			Input/Output	Bit No.	Input/Output	Bit No.
M11	PD0	Input	177	Input	182	N13	P77	Input	167	Input	172
		Enable	176	Enable	181			-	-	-	-
		Output	175	Output	180			-	-	-	-
R12	NC	-	-	-	-	P15	AVCC	-	-	-	-
		-	-	-	-			-	-	-	-
		-	-	-	-			-	-	-	-
P12	AVSS	-	-	-	-	N14	AVref	-	-	-	-
		-	-	-	-			-	-	-	-
		-	-	-	-			-	-	-	-
N12	P70	Input	174	Input	179	M13	P60	Input	166	Input	171
		-	-	-	-			Enable	165	Enable	170
		-	-	-	-			Output	164	Output	169
R13	P71	Input	173	Input	173	N15	P61	Input	163	Input	168
		-	-	-	-			Enable	162	Enable	167
		-	-	-	-			Output	161	Output	166
M12	P72	Input	172	Input	177	M14	P62	Input	160	Input	165
		-	-	-	-			Enable	159	Enable	164
		-	-	-	-			Output	158	Output	163
P13	P73	Input	171	Input	176	L12	P63	Input	157	Input	162
		-	-	-	-			Enable	156	Enable	161
		-	-	-	-			Output	155	Output	160
R14	P74	Input	170	Input	175	M15	P64	Input	154	Input	159
		-	-	-	-			Enable	153	Enable	158
		-	-	-	-			Output	152	Output	157
P14	P75	Input	169	Input	174	L13	P65	Input	151	Input	156
		-	-	-	-			Enable	150	Enable	155
		-	-	-	-			Output	149	Output	154
R15	P76	Input	168	Input	173	L14	P66	Input	148	Input	153
		-	-	-	-			Enable	147	Enable	152
		-	-	-	-			Output	146	Output	151

Pin No.	Pin Name	[Error]		[Correct]		Pin No.	Pin Name	[Error]		[Correct]	
		Input/Output	Bit No.	Input/Output	Bit No.			Input/Output	Bit No.	Input/Output	Bit No.
L15	P67	Input	145	Input	150	H13	ETDO	-	-	-	-
		Enable	144	Enable	149			-	-	-	-
		Output	143	Output	148			-	-	-	-
K12	VCC	-	-	-	-	H15	ETDI	-	-	-	-
		-	-	-	-			-	-	-	-
		-	-	-	-			-	-	-	-
K13	DrVCC	-	-	-	-	H14	ETCK	-	-	-	-
		-	-	-	-			-	-	-	-
		-	-	-	-			-	-	-	-
K15	USD-	-	-	-	-	G12	ETRST	-	-	-	-
		-	-	-	-			-	-	-	-
		-	-	-	-			-	-	-	-
K14	USD+	-	-	-	-	G13	PF2	Input	141	Input	144
		-	-	-	-			Enable	140	Enable	143
		-	-	-	-			Output	139	Output	142
J12	NC	-	-	-	-	G15	PF1	Input	138	Input	141
		-	-	-	-			Enable	137	Enable	140
		-	-	-	-			Output	136	Output	139
J13	DrVSS	-	-	-	-	G14	PF0	Input	135	Input	138
		-	-	-	-			Enable	134	Enable	137
		-	-	-	-			Output	133	Output	136
J15	PUPDPLS	-	-	Input	147	F12	NC	-	-	-	-
		-	-	Enable	146			-	-	-	-
		Output	142	Output	145			-	-	-	-
J14	VBUS	-	-	-	-	F13	VSS	-	-	-	-
		-	-	-	-			-	-	-	-
		-	-	-	-			-	-	-	-
H12	ETMS	-	-	-	-	F15	P27	Input	132	Input	135
		-	-	-	-			Enable	131	Enable	134
		-	-	-	-			Output	130	Output	133

			[Error]			[Correct]						[Error]			[Correct]		
Pin No.	Pin Name	Input/Output	Bit No.	Input/Output	Bit No.	Pin No.	Pin Name	Input/Output	Bit No.	Input/Output	Bit No.	Pin No.	Pin Name	Input/Output	Bit No.	Input/Output	Bit No.
F14	P26	Input	129	Input	132	C14	P14	Input	99	Input	102			Input	99	Input	102
		Enable	128	Enable	131			Enable	98	Enable	101			Enable	98	Enable	101
		Output	127	Output	130			Output	97	Output	100			Output	97	Output	100
E13	P25	Input	126	Input	129	B15	P13	Input	96	Input	99			Input	96	Input	99
		Enable	125	Enable	128			Enable	95	Enable	98			Enable	95	Enable	98
		Output	124	Output	127			Output	94	Output	97			Output	94	Output	97
E15	P24	Input	123	Input	126	B14	P12	Input	93	Input	96			Input	93	Input	96
		Enable	122	Enable	125			Enable	92	Enable	95			Enable	92	Enable	95
		Output	121	Output	124			Output	91	Output	94			Output	91	Output	94
E14	P23	Input	120	Input	123	A15	P11	Input	90	Input	93			Input	90	Input	93
		Enable	119	Enable	122			Enable	89	Enable	92			Enable	89	Enable	92
		Output	118	Output	121			Output	88	Output	91			Output	88	Output	91
E12	P22	Input	117	Input	120	C13	VSS	-	-	-	-			-	-	-	-
		Enable	116	Enable	119			-	-	-	-			-	-	-	-
		Output	115	Output	118			-	-	-	-			-	-	-	-
D15	P21	Input	114	Input	117	A14	P10	Input	87	Input	90			Input	87	Input	90
		Enable	113	Enable	116			Enable	86	Enable	89			Enable	86	Enable	89
		Output	112	Output	115			Output	85	Output	88			Output	85	Output	88
D14	P20	Input	111	Input	114	B13	PB7	Input	84	Input	87			Input	84	Input	87
		Enable	110	Enable	113			Enable	83	Enable	86			Enable	83	Enable	86
		Output	109	Output	112			Output	82	Output	85			Output	82	Output	85
D13	P17	Input	118	Input	121	C12	PB6	Input	81	Input	84			Input	81	Input	84
		Enable	107	Enable	110			Enable	80	Enable	83			Enable	80	Enable	83
		Output	106	Output	109			Output	79	Output	82			Output	79	Output	82
C15	P16	Input	105	Input	108	A13	PB5	Input	78	Input	81			Input	78	Input	81
		Enable	104	Enable	107			Enable	77	Enable	80			Enable	77	Enable	80
		Output	103	Output	106			Output	76	Output	79			Output	76	Output	79
D12	P15	Input	102	Input	105	B12	PB4	Input	75	Input	78			Input	75	Input	78
		Enable	101	Enable	104			Enable	74	Enable	77			Enable	74	Enable	77
		Output	100	Output	103			Output	73	Output	76			Output	73	Output	76

			[Error]			[Correct]						[Error]			[Correct]		
Pin No.	Pin Name	Input/Output	Bit No.	Input/Output	Bit No.	Pin No.	Pin Name	Input/Output	Bit No.	Input/Output	Bit No.	Pin No.	Pin Name	Input/Output	Bit No.	Input/Output	Bit No.
D11	PB3	Input	72	Input	75	C9	P35	Input	45	Input	48			Input	45	Input	48
		Enable	71	Enable	74			Enable	44	Enable	47			Enable	44	Enable	47
		Output	70	Output	73			Output	43	Output	46			Output	43	Output	46
A12	PB2	Input	69	Input	72	A9	P36	Input	42	Input	45			Input	42	Input	45
		Enable	68	Enable	71			Enable	41	Enable	44			Enable	41	Enable	44
		Output	67	Output	70			Output	40	Output	43			Output	40	Output	43
C11	PB1	Input	66	Input	69	B9	P37	Input	39	Input	42			Input	39	Input	42
		Enable	65	Enable	68			Enable	38	Enable	41			Enable	38	Enable	41
		Output	64	Output	67			Output	37	Output	40			Output	37	Output	40
B11	PB0	Input	63	Input	66	D8	P40	Input	36	Input	39			Input	36	Input	39
		Enable	62	Enable	65			Enable	35	Enable	38			Enable	35	Enable	38
		Output	61	Output	64			Output	34	Output	37			Output	34	Output	37
A11	VCC	-	-	-	-	C8	P41	Input	33	Input	36			Input	33	Input	36
		-	-	-	-			Enable	32	Enable	35			Enable	32	Enable	35
		-	-	-	-			Output	31	Output	34			Output	31	Output	34
D10	P30	Input	60	Input	63	A8	P42	Input	30	Input	33			Input	30	Input	33
		Enable	59	Enable	62			Enable	29	Enable	32			Enable	29	Enable	32
		Output	58	Output	61			Output	28	Output	31			Output	28	Output	31
C10	P31	Input	57	Input	60	B8	P43	Input	27	Input	30			Input	27	Input	30
		Enable	56	Enable	59			Enable	26	Enable	29			Enable	26	Enable	29
		Output	55	Output	58			Output	25	Output	28			Output	25	Output	28
A10	P32	Input	54	Input	57	D7	PEVref	-	-	-	-			-	-	-	-
		Enable	53	Enable	56			-	-	-	-			-	-	-	-
		Output	52	Output	55			-	-	-	-			-	-	-	-
B10	P33	Input	51	Input	54	C7	PECI	-	-	Input	27			-	-	Input	27
		Enable	50	Enable	53			-	-	Enable	26			-	-	Enable	26
		Output	49	Output	52			-	-	Output	25			-	-	Output	25
D9	P34	Input	48	Input	51	A7	P52	Input	24	Input	27			Input	24	Input	27
		Enable	47	Enable	50			Enable	23	Enable	26			Enable	23	Enable	26
		Output	46	Output	49			Output	22	Output	25			Output	22	Output	25

Pin No.	Pin Name	[Error]		[Correct]		Pin No.	Pin Name	[Error]		[Correct]	
		Input/Output	Bit No.	Input/Output	Bit No.			Input/Output	Bit No.	Input/Output	Bit No.
B7	P53	Input	21	Input	21	A4	PF5	Input	8	Input	8
		Enable	20	Enable	20			Enable	7	Enable	7
		Output	19	Output	19			Output	6	Output	6
D6	FWE	Input	18	Input	18	B4	PF4	Input	5	Input	5
		-	-	-	-			Enable	4	Enable	4
		-	-	-	-			Output	3	Output	3
C6	P54	Input	17	Input	17	C4	NC	-	-	-	-
		Enable	16	Enable	16			-	-	-	-
		Output	15	Output	15			-	-	-	-
A6	P55	Input	14	Input	14	A3	VSS	-	-	-	-
		Enable	13	Enable	13			-	-	-	-
		Output	12	Output	12			-	-	-	-
B6	P44	Input	11	Input	11	D4	PF3	Input	2	Input	2
		Enable	10	Enable	10			Enable	1	Enable	1
		Output	9	Output	9			Output	0	Output	0
C5	VCC	-	-	-	-	B3	RESO	-	-	-	-
		-	-	-	-			-	-	-	-
		-	-	-	-			-	-	-	-
A5	UXTAL	-	-	-	-	A2	XTAL	-	-	-	-
		-	-	-	-			-	-	-	-
		-	-	-	-			-	-	-	-
B5	UEXTAL	-	-	-	-	B2	EXTAL	-	-	-	-
		-	-	-	-			-	-	-	-
		-	-	-	-			-	-	-	-
D5	UXSEL	-	-	-	-	to ETDO					
		-	-	-	-						
		-	-	-	-						

Section 26. Boundary Scan (JTAG)

26.3 Register Descriptions

26.3.3 Boundary Scan Register (SDBSR)

Table 26.4 Correspondence between Pins and Boundary Scan Register (H8S/2462 Group)

Pin No.	Pin Name	[Error]		[Correct]		Pin No.	Pin Name	[Error]		[Correct]	
		Input/Output	Bit No.	Input/Output	Bit No.			Input/Output	Bit No.	Input/Output	Bit No.
from ETDI						10	PF6	Input	316	Input	319
								Enable	315	Enable	318
								Output	314	Output	317
1	VCC	-	-	-	-	11	NMI	Input	313	Input	316
								-	-	-	-
								-	-	-	-
2	P45	Input	332	Input	335	12	STBY	-	-	-	-
								Enable	331	Enable	334
								Output	330	Output	333
3	P46	Input	329	Input	332	13	VCL	-	-	-	-
								Enable	328	Enable	331
								Output	327	Output	330
4	P47	Input	326	Input	329	14	MD2	Input	312	Input	315
								Enable	325	Enable	328
								Output	324	Output	327
5	P56	Input	323	Input	326	15	P51	Input	311	Input	314
								Enable	322	Enable	325
								Output	321	Output	324
6	P57	Input	320	Input	323	16	P50	Input	308	Input	311
								Enable	319	Enable	322
								Output	318	Output	321
7	VSS	-	-	-	-	17	P97	Input	305	Input	308
								Enable	304	Enable	307
								Output	303	Output	306
8	RES	-	-	-	-	18	P96	Input	302	Input	305
								Enable	301	Enable	304
								Output	300	Output	303
9	MD1	Input	317	Input	320	19	P95	Input	299	Input	302
								Enable	298	Enable	301
								Output	297	Output	300

Pin No.	Pin Name	[Error]		[Correct]		Pin No.	Pin Name	[Error]		[Correct]	
		Input/Output	Bit No.	Input/Output	Bit No.			Input/Output	Bit No.	Input/Output	Bit No.
20	P94	Input	296	Input	299	30	PC2	Input	266	Input	269
								Enable	295	Enable	298
								Output	294	Output	297
21	P93	Input	293	Input	296	31	PC1	Input	263	Input	266
								Enable	292	Enable	295
								Output	291	Output	294
22	P92	Input	290	Input	293	32	PC0	Input	260	Input	263
								Enable	289	Enable	292
								Output	288	Output	291
23	P91	Input	287	Input	290	33	PA7	Input	257	Input	260
								Enable	286	Enable	289
								Output	285	Output	288
24	P90	Input	284	Input	287	34	PA6	Input	254	Input	257
								Enable	283	Enable	286
								Output	282	Output	285
25	PC7	Input	281	Input	284	35	PA5	Input	251	Input	254
								Enable	280	Enable	283
								Output	279	Output	282
26	PC6	Input	278	Input	281	36	VCC	-	-	-	-
								Enable	277	Enable	280
								Output	276	Output	279
27	PC5	Input	275	Input	278	37	PA4	Input	248	Input	251
								Enable	274	Enable	277
								Output	273	Output	276
28	PC4	Input	272	Input	275	38	PA3	Input	245	Input	248
								Enable	271	Enable	274
								Output	270	Output	273
29	PC3	Input	269	Input	272	39	PA2	Input	242	Input	245
								Enable	268	Enable	271
								Output	267	Output	270

			[Error]			[Correct]						[Error]			[Correct]		
Pin No.	Pin Name	Input/Output	Bit No.	Input/Output	Bit No.	Pin No.	Pin Name	Input/Output	Bit No.	Input/Output	Bit No.	Pin No.	Pin Name	Input/Output	Bit No.	Input/Output	Bit No.
40	PA1	Input	239	Input	242	50	P80	Input	212	Input	215	51	PE7	Input	209	Input	212
		Enable	238	Enable	241			Enable	211	Enable	214			Enable	208	Enable	211
		Output	237	Output	240			Output	210	Output	213			Output	207	Output	210
41	PA0	Input	236	Input	239	52	PE6	Input	206	Input	209	53	PE5	Input	203	Input	206
		Enable	235	Enable	238			Enable	205	Enable	208			Enable	202	Enable	205
		Output	234	Output	237			Output	204	Output	207			Output	201	Output	204
42	VSS	-	-	-	-	54	PE4	Input	200	Input	203	55	PE3	Input	197	Input	200
		-	-	-	-			Enable	199	Enable	199			Enable	196	Enable	199
		-	-	-	-			Output	198	Output	198			Output	195	Output	198
43	P87	Input	233	Input	236	56	PE2	Input	194	Input	197	57	PE1	Input	191	Input	194
		Enable	232	Enable	235			Enable	193	Enable	196			Enable	190	Enable	193
		Output	231	Output	234			Output	192	Output	195			Output	189	Output	192
44	P86	Input	230	Input	233	58	PE0	Input	188	Input	191	59	PD7	Input	185	Input	188
		Enable	229	Enable	232			Enable	187	Enable	190			Enable	186	Enable	189
		Output	228	Output	231			Output	186	Output	189			Output	185	Output	188
45	P85	Input	227	Input	230	59	PD7	Input	185	Input	188	60	PD6	Input	182	Input	185
		Enable	226	Enable	229			Enable	184	Enable	184			Enable	178	Enable	181
		Output	225	Output	228			Output	183	Output	183			Output	177	Output	180
46	P84	Input	224	Input	227	61	PD5	Input	179	Input	182	62	PD4	Input	176	Input	179
		Enable	223	Enable	226			Enable	181	Enable	178			Enable	178	Enable	178
		Output	222	Output	225			Output	180	Output	180			Output	177	Output	177
47	P83	Input	221	Input	224	63	PD3	Input	173	Input	176	64	PD2	Input	170	Input	173
		Enable	220	Enable	223			Enable	175	Enable	172			Enable	172	Enable	172
		Output	219	Output	222			Output	174	Output	174			Output	171	Output	174
48	P82	Input	218	Input	221	65	PD1	Input	167	Input	170	66	PD0	Input	164	Input	167
		Enable	217	Enable	220			Enable	169	Enable	166			Enable	166	Enable	166
		Output	216	Output	219			Output	168	Output	168			Output	165	Output	165
49	P81	Input	215	Input	218	67	AVSS	-	-	-	-	68	P70	Input	161	Input	164
		Enable	214	Enable	217			-	-	-	-			-	-	-	-
		Output	213	Output	216			-	-	-	-			-	-	-	-

			[Error]			[Correct]						[Error]			[Correct]		
Pin No.	Pin Name	Input/Output	Bit No.	Input/Output	Bit No.	Pin No.	Pin Name	Input/Output	Bit No.	Input/Output	Bit No.	Pin No.	Pin Name	Input/Output	Bit No.	Input/Output	Bit No.
60	PD6	Input	182	Input	185	70	P72	Input	159	Input	162	71	P73	Input	158	Input	161
		Enable	181	Enable	184			-	-	-	-			-	-	-	-
		Output	180	Output	183			-	-	-	-			-	-	-	-
61	PD5	Input	179	Input	182	72	P74	Input	157	Input	160	73	P75	Input	156	Input	159
		Enable	178	Enable	181			-	-	-	-			-	-	-	-
		Output	177	Output	180			-	-	-	-			-	-	-	-
62	PD4	Input	176	Input	179	74	P76	Input	155	Input	158	75	P77	Input	154	Input	157
		Enable	175	Enable	178			-	-	-	-			-	-	-	-
		Output	174	Output	177			-	-	-	-			-	-	-	-
63	PD3	Input	173	Input	176	76	AVCC	-	-	-	-	77	Avref	-	-	-	-
		Enable	172	Enable	175			-	-	-	-			-	-	-	-
		Output	171	Output	174			-	-	-	-			-	-	-	-
64	PD2	Input	170	Input	173	78	P60	Input	153	Input	156	79	P61	Input	150	Input	153
		Enable	169	Enable	172			Enable	152	Enable	152			Enable	149	Enable	152
		Output	168	Output	171			Output	151	Output	154			Output	148	Output	151
65	PD1	Input	167	Input	170	79	P61	Input	150	Input	153	66	PD0	Input	164	Input	167
		Enable	166	Enable	169			Enable	152	Enable	152			Enable	166	Enable	166
		Output	165	Output	168			Output	151	Output	154			Output	165	Output	165
66	PD0	Input	164	Input	167	67	AVSS	-	-	-	-	68	P70	Input	161	Input	164
		Enable	163	Enable	166			-	-	-	-			-	-	-	-
		Output	162	Output	165			-	-	-	-			-	-	-	-
67	AVSS	-	-	-	-	68	P70	Input	161	Input	164	69	P71	Input	160	Input	163
		-	-	-	-			-	-	-	-			-	-	-	-
		-	-	-	-			-	-	-	-			-	-	-	-

		[Error]		[Correct]				[Error]		[Correct]	
Pin No.	Pin Name	Input/Output	Bit No.	Input/Output	Bit No.	Pin No.	Pin Name	Input/Output	Bit No.	Input/Output	Bit No.
80	P62	Input	147	Input	150	90	ETCK	-	-	-	-
		Enable	146	Enable	149			-	-	-	-
		Output	145	Output	148			-	-	-	-
81	P63	Input	144	Input	147	91	ETRST	-	-	-	-
		Enable	143	Enable	146			-	-	-	-
		Output	142	Output	145			-	-	-	-
82	P64	Input	141	Input	144	92	PF1	Input	129	Input	132
		Enable	140	Enable	143			Enable	128	Enable	131
		Output	139	Output	142			Output	127	Output	130
83	P65	Input	138	Input	141	93	PF0	Input	126	Input	129
		Enable	137	Enable	140			Enable	125	Enable	128
		Output	136	Output	139			Output	124	Output	127
84	P66	Input	135	Input	138	94	VSS	-	-	-	-
		Enable	134	Enable	137			-	-	-	-
		Output	133	Output	136			-	-	-	-
85	P67	Input	132	Input	135	95	P27	Input	123	Input	126
		Enable	131	Enable	134			Enable	122	Enable	125
		Output	130	Output	133			Output	121	Output	124
86	VCC	-	-	-	-	96	P26	Input	120	Input	123
		-	-	-	-			Enable	119	Enable	122
		-	-	-	-			Output	118	Output	121
87	ETMS	-	-	-	-	97	P25	Input	117	Input	120
		-	-	-	-			Enable	116	Enable	119
		-	-	-	-			Output	115	Output	118
88	ETDO	-	-	-	-	98	P24	Input	114	Input	117
		-	-	-	-			Enable	113	Enable	116
		-	-	-	-			Output	112	Output	115
89	ETDI	-	-	-	-	99	P23	Input	111	Input	114
		-	-	-	-			Enable	110	Enable	113
		-	-	-	-			Output	109	Output	112

		[Error]		[Correct]				[Error]		[Correct]	
Pin No.	Pin Name	Input/Output	Bit No.	Input/Output	Bit No.	Pin No.	Pin Name	Input/Output	Bit No.	Input/Output	Bit No.
100	P22	Input	108	Input	111	110	VSS	-	-	-	-
		Enable	107	Enable	110			-	-	-	-
		Output	106	Output	109			-	-	-	-
101	P21	Input	105	Input	108	111	P10	Input	78	Input	81
		Enable	104	Enable	107			Enable	77	Enable	80
		Output	103	Output	106			Output	76	Output	79
102	P20	Input	102	Input	105	112	PB7	Input	75	Input	78
		Enable	101	Enable	104			Enable	74	Enable	77
		Output	100	Output	103			Output	73	Output	76
103	P17	Input	99	Input	102	113	PB6	Input	72	Input	75
		Enable	98	Enable	101			Enable	71	Enable	74
		Output	97	Output	100			Output	70	Output	73
104	P16	Input	96	Input	99	114	PB5	Input	69	Input	72
		Enable	95	Enable	98			Enable	68	Enable	71
		Output	94	Output	97			Output	67	Output	70
105	P15	Input	93	Input	96	115	PB4	Input	66	Input	69
		Enable	92	Enable	95			Enable	65	Enable	68
		Output	91	Output	94			Output	64	Output	67
106	P14	Input	90	Input	93	116	PB3	Input	63	Input	66
		Enable	89	Enable	92			Enable	62	Enable	65
		Output	88	Output	91			Output	61	Output	64
107	P13	Input	87	Input	90	117	PB2	Input	60	Input	63
		Enable	86	Enable	89			Enable	59	Enable	62
		Output	85	Output	88			Output	58	Output	61
108	P12	Input	84	Input	87	118	PB1	Input	57	Input	60
		Enable	83	Enable	86			Enable	56	Enable	59
		Output	82	Output	85			Output	55	Output	58
109	P11	Input	81	Input	84	119	PB0	Input	54	Input	57
		Enable	80	Enable	83			Enable	53	Enable	56
		Output	79	Output	82			Output	52	Output	55

Pin No.	Pin Name	[Error]		[Correct]		Pin No.	Pin Name	[Error]		[Correct]	
		Input/Output	Bit No.	Input/Output	Bit No.			Input/Output	Bit No.	Input/Output	Bit No.
120	VCC	-	-	-	-	130	P41	Input	24	Input	27
		-	-	-	-			Enable	23	Enable	26
		-	-	-	-			Output	22	Output	25
121	P30	Input	51	Input	54	131	P42	Input	21	Input	24
		Enable	50	Enable	53			Enable	20	Enable	23
		Output	49	Output	52			Output	19	Output	22
122	P31	Input	48	Input	51	132	P43	Input	18	Input	21
		Enable	47	Enable	50			Enable	17	Enable	20
		Output	46	Output	49			Output	16	Output	19
123	P32	Input	45	Input	48	133	PEVref	-	-	-	-
		Enable	44	Enable	47			-	-	-	-
		Output	43	Output	46			-	-	-	-
124	P33	Input	42	Input	45	134	PECI	-	-	Input	18
		Enable	41	Enable	44			-	-	Enable	17
		Output	40	Output	43			-	-	Output	16
125	P34	Input	39	Input	42	135	P52	Input	15	Input	15
		Enable	38	Enable	41			Enable	14	Enable	14
		Output	37	Output	40			Output	13	Output	13
126	P35	Input	36	Input	39	136	P53	Input	12	Input	12
		Enable	35	Enable	38			Enable	11	Enable	11
		Output	34	Output	37			Output	10	Output	10
127	P36	Input	33	Input	36	137	FWE	Input	9	Input	9
		Enable	32	Enable	35			-	-	-	-
		Output	31	Output	34			-	-	-	-
128	P37	Input	30	Input	33	138	P54	Input	8	Input	8
		Enable	29	Enable	32			Enable	7	Enable	7
		Output	28	Output	31			Output	6	Output	6
129	P40	Input	27	Input	30	139	P55	Input	5	Input	5
		Enable	26	Enable	29			Enable	4	Enable	4
		Output	25	Output	28			Output	3	Output	3

Pin No.	Pin Name	[Error]		[Correct]	
		Input/Output	Bit No.	Input/Output	Bit No.
140	P44	Input	2	Input	2
		Enable	1	Enable	1
		Output	0	Output	0
141	VSS	-	-	-	-
		-	-	-	-
		-	-	-	-
142	RESO	-	-	-	-
		-	-	-	-
		-	-	-	-
143	XTAL	-	-	-	-
		-	-	-	-
		-	-	-	-
144	EXTAL	-	-	-	-
		-	-	-	-
		-	-	-	-

to ETDO

Section 26. Boundary Scan (JTAG)

26.3 Register Descriptions

26.3.3 Boundary Scan Register (SDBSR)

Table 26.5 Correspondence between Pins and Boundary Scan Register (H8S/2463 Group)

Pin No.	Pin Name	Input/Output	Bit No.	Pin No.	Pin Name	Input/Output	Bit No.
from ETDI				10	PF6	Input	316
						Enable	315
						Output	314
1	VCC	-	-	11	NMI	Input	313
						-	-
						-	-
2	P45	Input	332	12	STBY	-	-
						Enable	-
						Output	-
3	P46	Input	329	13	VCL	-	-
						Enable	-
						Output	-
4	P47	Input	326	14	MD2	Input	312
						Enable	-
						Output	-
5	P56	Input	323	15	P51	Input	311
						Enable	310
						Output	309
6	P57	Input	320	16	P50	Input	308
						Enable	307
						Output	306
7	VSS	-	-	17	P97	Input	305
						Enable	304
						Output	303
8	RES	-	-	18	P96	Input	302
						Enable	301
						Output	300
9	MD1	Input	317	19	P95	Input	299
						Enable	298
						Output	297
20	P94	Input	296	30	PC2	Input	266
						Enable	265
						Output	264
21	P93	Input	293	31	PC1	Input	263
						Enable	262
						Output	261
22	P92	Input	290	32	PC0	Input	260
						Enable	259
						Output	258
23	P91	Input	287	33	PA7	Input	257
						Enable	256
						Output	255
24	P90	Input	284	34	PA6	Input	254
						Enable	253
						Output	252
25	PC7	Input	281	35	PA5	Input	251
						Enable	250
						Output	249
26	PC6	Input	278	36	VCC	-	-
						Enable	-
						Output	-
27	PC5	Input	275	37	PA4	Input	248
						Enable	247
						Output	246
28	PC4	Input	272	38	PA3	Input	245
						Enable	244
						Output	243
29	PC3	Input	269	39	PA2	Input	242
						Enable	241
						Output	240

Pin No.	Pin Name	Input/Output	Bit No.	Pin No.	Pin Name	Input/Output	Bit No.
40	PA1	Input	239	50	P80	Input	212
		Enable	238			Enable	211
		Output	237			Output	210
41	PA0	Input	236	51	PE7	Input	209
		Enable	235			Enable	208
		Output	234			Output	207
42	VSS	-	-	52	PE6	Input	206
		-	-			Enable	205
		-	-			Output	204
43	P87	Input	233	53	PE5	Input	203
		Enable	232			Enable	202
		Output	231			Output	201
44	P86	Input	230	54	PE4	Input	200
		Enable	229			Enable	199
		Output	228			Output	198
45	P85	Input	227	55	PE3	Input	197
		Enable	226			Enable	196
		Output	225			Output	195
46	P84	Input	224	56	PE2	Input	194
		Enable	223			Enable	193
		Output	222			Output	192
47	P83	Input	221	57	PE1	Input	191
		Enable	220			Enable	190
		Output	219			Output	189
48	P82	Input	218	58	PE0	Input	188
		Enable	217			Enable	187
		Output	216			Output	186
49	P81	Input	215	59	PD7	Input	185
		Enable	214			Enable	184
		Output	213			Output	183

Pin No.	Pin Name	Input/Output	Bit No.	Pin No.	Pin Name	Input/Output	Bit No.
60	PD6	Input	182	70	P72	Input	159
		Enable	181			-	-
		Output	180			-	-
61	PD5	Input	179	71	P73	Input	158
		Enable	178			-	-
		Output	177			-	-
62	PD4	Input	176	72	P74	Input	157
		Enable	175			-	-
		Output	174			-	-
63	PD3	Input	173	73	P75	Input	156
		Enable	172			-	-
		Output	171			-	-
64	PD2	Input	170	74	P76	Input	155
		Enable	169			-	-
		Output	168			-	-
65	PD1	Input	167	75	P77	Input	154
		Enable	166			-	-
		Output	165			-	-
66	PD0	Input	164	76	AVCC	-	-
		Enable	163			-	-
		Output	162			-	-
67	AVSS	-	-	77	P60	Input	153
		-	-			Enable	152
		-	-			Output	151
68	P70	Input	161	78	P61	Input	150
		-	-			Enable	149
		-	-			Output	148
69	P71	Input	160	79	P62	Input	147
		-	-			Enable	146
		-	-			Output	145

Pin No.	Pin Name	Input/Output	Bit No.	Pin No.	Pin Name	Input/Output	Bit No.
80	P63	Input	144	90	ETRST	-	-
		Enable	143			-	-
		Output	142			-	-
81	P64	Input	141	91	NC	-	-
		Enable	140			-	-
		Output	139			-	-
82	P65	Input	138	92	PF1	Input	129
		Enable	137			Enable	128
		Output	136			Output	127
83	P66	Input	135	93	PF0	Input	126
		Enable	134			Enable	125
		Output	133			Output	124
84	P67	Input	132	94	VSS	-	-
		Enable	131			-	-
		Output	130			-	-
85	VCC	-	-	95	P27	Input	123
		-	-			Enable	122
		-	-			Output	121
86	ETMS	-	-	96	P26	Input	120
		-	-			Enable	119
		-	-			Output	118
87	ETDO	-	-	97	P25	Input	117
		-	-			Enable	116
		-	-			Output	115
88	ETDI	-	-	98	P24	Input	114
		-	-			Enable	113
		-	-			Output	112
89	ETCK	-	-	99	P23	Input	111
		-	-			Enable	110
		-	-			Output	109

Pin No.	Pin Name	Input/Output	Bit No.	Pin No.	Pin Name	Input/Output	Bit No.
100	P22	Input	108	110	VSS	-	-
		Enable	107			-	-
		Output	106			-	-
101	P21	Input	105	111	P10	Input	78
		Enable	104			Enable	77
		Output	103			Output	76
102	P20	Input	102	112	PB7	Input	75
		Enable	101			Enable	74
		Output	100			Output	73
103	P17	Input	99	113	PB6	Input	72
		Enable	98			Enable	71
		Output	97			Output	70
104	P16	Input	96	114	PB5	Input	69
		Enable	95			Enable	68
		Output	94			Output	67
105	P15	Input	93	115	PB4	Input	66
		Enable	92			Enable	65
		Output	91			Output	64
106	P14	Input	90	116	PB3	Input	63
		Enable	89			Enable	62
		Output	88			Output	61
107	P13	Input	87	117	PB2	Input	60
		Enable	86			Enable	59
		Output	85			Output	58
108	P12	Input	84	118	PB1	Input	57
		Enable	83			Enable	56
		Output	82			Output	55
109	P11	Input	81	119	PB0	Input	54
		Enable	80			Enable	53
		Output	79			Output	52

Pin No.	Pin Name	Input/Output	Bit No.	Pin No.	Pin Name	Input/Output	Bit No.
120	VCC	-	-	130	P41	Input	24
		-	-			Enable	23
		-	-			Output	22
121	P30	Input	51	131	P42	Input	21
		Enable	50			Enable	20
		Output	49			Output	19
122	P31	Input	48	132	P43	Input	18
		Enable	47			Enable	17
		Output	46			Output	16
123	P32	Input	45	133	P52	Input	15
		Enable	44			Enable	14
		Output	43			Output	13
124	P33	Input	42	134	P53	Input	12
		Enable	41			Enable	11
		Output	40			Output	10
125	P34	Input	39	135	FWE	Input	9
		Enable	38			-	-
		Output	37			-	-
126	P35	Input	36	136	P54	Input	8
		Enable	35			Enable	7
		Output	34			Output	6
127	P36	Input	33	137	P55	Input	5
		Enable	32			Enable	4
		Output	31			Output	3
128	P37	Input	30	138	P44	Input	2
		Enable	29			Enable	1
		Output	28			Output	0
129	P40	Input	27	139	NC	-	-
		Enable	26			-	-
		Output	25			-	-

Pin No.	Pin Name	Input/Output	Bit No.
140	NC	-	-
		-	-
		-	-
141	VSS	-	-
		-	-
		-	-
142	RESO	-	-
		-	-
		-	-
143	XTAL	-	-
		-	-
		-	-
144	EXTAL	-	-
		-	-
		-	-
to ETDO			

Section 29. List of Registers

[Error]

Register Abbreviation	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Module
SUBMSTPBL	SMSTPB7	SMSTPB6	SMSTPB5	PECI	SCIF	SMSTPB2	LPC	SMSTPB0	SYSTEM

[Correct]

Register Abbreviation	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Module
SUBMSTPBL	SMSTPB7	SMSTPB6	SMSTPB5	SMSTPB4	SMSTPB3	SMSTPB2	SMSTPB1	SMSTPB0	SYSTEM