

# APPENDIX B: RTAX-S Prototyping Adaptor Pin Mapping

Table 12. RTAX-S Prototyping Adaptor Pin Mapping Table

Net name**	Signal Group	RTAX250S, RTAX1000S, RTAX2000S		Signal Group	RTAX250S, RTAX1000S, RTAX2000S	
		Pin number	Pin Number		Pin number	Pin Number
GND		1				
NOT CONNECTED		2				
RTAX_VCCA_1.5V		3				
RTAX_B7_IO341NB7F31	IO	4	F5			
RTAX_B7_IO341PB7F31	IO	5	E5			
RTAX_B7_IO338NB7F31	IO	6	F4			
RTAX_B7_IO338PB7F31	IO	7	E4			
RTAX_VCCI_B7		8				
GND		9				
RTAX_B7_IO334NB7F31	IO	10	F1			
RTAX_B7_IO334PB7F31	IO	11	E2			
RTAX_B7_IO335NB7F31	IO	12	F2			
RTAX_B7_IO335PB7F31	IO	13	F3			
RTAX_VCCA_1.5V		14				
GND		15				
RTAX_B7_IO320NB7F29	IO	16	G1			
RTAX_B7_IO320PB7F29	IO	17	G2			
RTAX_B7_IO318NB7F29	IO	18	H4			
RTAX_B7_IO318PB7F29	IO	19	G4			
RTAX_VCCI_B7		20				
GND		21				
RTAX_B7_IO316NB7F29	IO	22	H5			
RTAX_B7_IO316PB7F29	IO	23	G5			
RTAX_B7_IO317NB7F29	IO	24	J1			
RTAX_B7_IO317PB7F29	IO	25	J2			
RTAX_VCCI_B7		26				
GND		27				
RTAX_B7_IO312NB7F29	IO	28	K1			
RTAX_B7_IO312PB7F29	IO	29	K2			
RTAX_B7_IO315NB7F29	IO	30	K4			
RTAX_B7_IO315PB7F29	IO	31	J4			
RTAX_VCCA_1.5V		32				
GND		33				
RTAX_B7_IO310NB7F29	IO	34	K5			
RTAX_B7_IO310PB7F29	IO	35	J5			
RTAX_B7_IO311NB7F29	IO	36	K6			
RTAX_B7_IO311PB7F29	IO	37	J6			
RTAX_VCCI_B7		38				
GND		39				
RTAX_B7_IO303NB7F28	IO	40	L4			
RTAX_B7_IO303PB7F28	IO	41	L6			
RTAX_B7_IO300NB7F28	IO	42	L3			
RTAX_B7_IO300PB7F28	IO	43	L2			
NOT CONNECTED		44				
GND		45				
RTAX_B6_IO296NB6F27	IO	46	M3			
RTAX_B6_IO296PB6F27	IO	47	M4			
RTAX_B6_IO294NB6F27	IO	48	M2			
RTAX_B6_IO294PB6F27	IO	49	N1			
RTAX_VCCI_B6		50				
GND		51				
RTAX_B6_IO287NB6F26	IO	52	P4			
RTAX_B6_IO287PB6F26	IO	53	N5			
RTAX_B6_IO286NB6F26	IO	54	P3			
RTAX_B6_IO286PB6F26	IO	55	N4			
RTAX_VCCA_1.5V		56				
GND		57				
RTAX_B6_IO285NB6F26	IO	58	N2			
RTAX_B6_IO285PB6F26	IO	59	P2			
RTAX_B6_IO284NB6F26	IO	60	R4			
RTAX_B6_IO284PB6F26	IO	61	P5			
RTAX_VCCI_B6		62				
GND		63				
RTAX_B6_IO282NB6F26	IO	64	P7			
RTAX_B6_IO282PB6F26	IO	65	P6			
RTAX_B6_IO281NB6F26	IO	66	R5			
RTAX_B6_IO281PB6F26	IO	67	R6			
RTAX_VCCI_B6		68				
GND		69				
RTAX_B6_IO280NB6F26	IO	70	T2			
RTAX_B6_IO280PB6F26	IO	71	R2			
RTAX_B6_IO279NB6F26	IO	72	R7			
RTAX_B6_IO279PB6F26	IO	73	T6			
RTAX_VCCA_1.5V		74				
GND		75				
RTAX_B6_IO265NB6F24	IO	76	T5			
RTAX_B6_IO265PB6F24	IO	77	T4			
RTAX_B6_IO262NB6F24	IO	78	U5			
RTAX_B6_IO262PB6F24	IO	79	U4			
RTAX_VCCI_B6		80				
GND		81				
RTAX_B6_IO261NB6F24	IO	82	V2			
RTAX_B6_IO261PB6F24	IO	83	U1			
RTAX_B6_IO258NB6F24	IO	84	U3			
RTAX_B6_IO258PB6F24	IO	85	U2			
RTAX_B6_IO257PB6F24*	IO	86	V4			
RTAX_VCCA_1.5V		87				
GND		88				
GND		89				
NOT CONNECTED		90				

\* RTAX\_B6\_IO257PB6F24 signal is wired as single line

\*\* Refer to the "User I/O Naming Convention" section on page 18 for the Net Name convention.



**Table 12. RTAX-S Prototyping Adaptor Pin Mapping Table (continued)**

Net name**	Signal Group	RTAX250S, RTAX1000S, RTAX2000S	A3PE3000	Net name**	Signal Group	RTAX250S, RTAX1000S, RTAX2000S	A3PE3000
		Pin number	Pin Number			Pin number	Pin Number
NOT CONNECTED		91		NOT CONNECTED		141	
RTAX_B5_IO244NB5F22	IO	92	Y4	RTAX_B4_IO212NB4F19/CLKEN	IO/CLKE	142	W14
RTAX_B5_IO244PB5F22	IO	93	AA4	RTAX_B4_IO212PB4F19/CLKEP	IO/CLKE	143	W15
RTAX_B5_IO242NB5F22	IO	94	AB4	RTAX_VCCI_B4		144	
RTAX_B5_IO242PB5F22	IO	95	AB5	GND		145	
RTAX_VCCI_B5		96		RTAX_B4_IO207NB4F19	IO	146	W11
GND		97		RTAX_B4_IO207PB4F19	IO	147	Y11
RTAX_B5_IO243NB5F22	IO	98	AA5	NOT CONNECTED		148	
RTAX_B5_IO243PB5F22	IO	99	AA6	NOT CONNECTED		149	
RTAX_B5_IO240NB5F22	IO	100	AB6	RTAX_VCCA_1.5V		150	
RTAX_B5_IO240PB5F22	IO	101	AB7	GND		151	
RTAX_VCCA_1.5V		102		RTAX_B4_IO192NB4F17	IO	152	W12
GND		103		RTAX_B4_IO192PB4F17	IO	153	W13
RTAX_B5_IO238NB5F22	IO	104	Y6	RTAX_B4_IO191NB4F17	IO	154	AB12
RTAX_B5_IO238PB5F22	IO	105	Y7	RTAX_B4_IO191PB4F17	IO	155	AB13
RTAX_B5_IO239NB5F22	IO	106	AA7	RTAX_VCCI_B4		156	
RTAX_B5_IO239PB5F22	IO	107	AA8	GND		157	
RTAX_VCCI_B5		108		RTAX_B4_IO190NB4F17	IO	158	AA12
GND		109		RTAX_B4_IO190PB4F17	IO	159	AA13
RTAX_B5_IO236NB5F22	IO	110	AB8	RTAX_B4_IO185NB4F17	IO	160	AB14
RTAX_B5_IO236PB5F22	IO	111	AB9	RTAX_B4_IO185PB4F17	IO	161	AB15
RTAX_B5_IO237NB5F22	IO	112	AA10	RTAX_VCCA_1.5V		162	
RTAX_B5_IO237PB5F22	IO	113	AA9	GND		163	
RTAX_VCCA_1.5V		114		RTAX_B4_IO184NB4F17	IO	164	AA16
GND		115		RTAX_B4_IO184PB4F17	IO	165	AA17
NOT CONNECTED		116		RTAX_B4_IO183NB4F17	IO	166	W16
NOT CONNECTED		117		RTAX_B4_IO183PB4F17	IO	167	W17
RTAX_B5_IO217NB5F20	IO	118	W10	RTAX_VCCI_B4		168	
RTAX_B5_IO217PB5F20	IO	119	Y10	GND		169	
RTAX_VCCI_B5		120		RTAX_B4_IO182NB4F17	IO	170	AB16
GND		121		RTAX_B4_IO182PB4F17	IO	171	AB17
RTAX_B5_IO215NB5F20/CLKHN	IO/CLKH	122	W7	RTAX_B4_IO181NB4F17	IO	172	AA18
RTAX_B5_IO215PB5F20/CLKHP	IO/CLKH	123	V7	RTAX_B4_IO181PB4F17	IO	173	AA19
NOT CONNECTED		124		NOT CONNECTED		174	
NOT CONNECTED		125		RTAX_VCCA_1.5V		175	
NOT CONNECTED		126		GND		176	
NOT CONNECTED		127		GND		177	
RTAX_B5_IO214NB5F20/CLKGN	IO/CLKG	128	U8	NOT CONNECTED		178	
RTAX_B5_IO214PB5F20/CLKGP	IO/CLKG	129	T9	RTAX_B3_IO167NB3F15	IO	179	V22
NOT CONNECTED		130		RTAX_B3_IO167PB3F15	IO	180	U22
NOT CONNECTED		131		RTAX_B3_IO165NB3F15	IO	181	U19
NOT CONNECTED		132		RTAX_B3_IO165PB3F15	IO	182	T19
GND		133		RTAX_B3_IO161NB3F15	IO	183	T18
NOT CONNECTED		134		RTAX_B3_IO161PB3F15	IO	184	R18
NOT CONNECTED		135		RTAX_VCCI_B3		185	
RTAX_B4_IO213NB4F19/CLKFN	IO/CLKF	136	V15	GND		186	
RTAX_B4_IO213PB4F19/CLKFP	IO/CLKF	137	V16	RTAX_B3_IO163NB3F15	IO	187	U21
NOT CONNECTED		138		RTAX_B3_IO163PB3F15	IO	188	T21
NOT CONNECTED		139		RTAX_B3_IO149NB3F13	IO	189	P17
NOT CONNECTED		140		RTAX_B3_IO149PB3F13	IO	190	P18

\*\* Refer to the "User I/O Naming Convention" section on page 18 for the Net Name convention.



Table 12. RTAX-S Prototyping Adaptor Pin Mapping Table (continued)

Net name**	Signal Group	RTAX250S, RTAX1000S, RTAX 2000S		RTAX250S, RTAX1000S, RTAX 2000S	
		Pin number	Pin Number	Pin number	Pin Number
RTAX_VCCA_1.5V		191			
GND		192			
RTAX_B3_JO147NB3F13	IO	193	T22		
RTAX_B3_JO147PB3F13	IO	194	R22		
RTAX_B3_JO148NB3F13	IO	195	R19		
RTAX_B3_JO148PB3F13	IO	196	P19		
RTAX_VCCI_B3		197			
GND		198			
RTAX_B3_JO145NB3F13	IO	199	R21		
RTAX_B3_JO145PB3F13	IO	200	P21		
RTAX_B3_JO146NB3F13	IO	201	P22		
RTAX_B3_JO146PB3F13	IO	202	N22		
RTAX_VCCI_B3		203			
GND		204			
RTAX_B3_JO141NB3F13	IO	205	N17		
RTAX_B3_JO141PB3F13	IO	206	N19		
RTAX_B3_JO142NB3F13	IO	207	M20		
RTAX_B3_JO142PB3F13	IO	208	M19		
RTAX_VCCA_1.5V		209			
GND		210			
RTAX_B3_JO139NB3F13	IO	211	N21		
RTAX_B3_JO139PB3F13	IO	212	M21		
RTAX_B3_JO137NB3F12	IO	213	N18		
RTAX_B3_JO137PB3F12	IO	214	M17		
RTAX_VCCI_B3		215			
GND		216			
RTAX_B3_JO132NB3F12	IO	217	N16		
RTAX_B3_JO132PB3F12	IO	218	M15		
RTAX_B3_JO129NB3F12	IO	219	L17		
RTAX_B3_JO129PB3F12	IO	220	M16		
NOT CONNECTED		221			
GND		222			
RTAX_B2_JO117NB2F10	IO	223	L19		
RTAX_B2_JO117PB2F10	IO	224	L16		
RTAX_B2_JO115NB2F10	IO	225	L21		
RTAX_B2_JO115PB2F10	IO	226	L22		
RTAX_VCCI_B2		227			
GND		228			
RTAX_B2_JO114NB2F10	IO	229	K17		
RTAX_B2_JO114PB2F10	IO	230	K18		
RTAX_B2_JO113NB2F10	IO	231	K19		
RTAX_B2_JO113PB2F10	IO	232	L20		
RTAX_VCCA_1.5V		233			
GND		234			
RTAX_B2_JO112NB2F10	IO	235	J17		
RTAX_B2_JO112PB2F10	IO	236	J18		
RTAX_B2_JO111NB2F10	IO	237	K20		
RTAX_B2_JO111PB2F10	IO	238	J19		
RTAX_VCCI_B2		239			
GND		240			
RTAX_B2_JO110NB2F10	IO	241	K22		
RTAX_B2_JO110PB2F10	IO	242	J22		
RTAX_B2_JO107NB2F10	IO	243	K21		
RTAX_B2_JO107PB2F10	IO	244	J21		
RTAX_VCCI_B2		245			
GND		246			
RTAX_B2_JO100NB2F9	IO	247	H18		
RTAX_B2_JO100PB2F9	IO	248	H19		
RTAX_B2_JO99NB2F9	IO	249	G19		
RTAX_B2_JO99PB2F9	IO	250	G18		
RTAX_VCCA_1.5V		251			
GND		252			
RTAX_B2_JO91NB2F8	IO	253	G21		
RTAX_B2_JO91PB2F8	IO	254	G20		
RTAX_B2_JO88NB2F8	IO	255	F18		
RTAX_B2_JO88PB2F8	IO	256	E18		
RTAX_VCCI_B2		257			
GND		258			
RTAX_B2_JO89NB2F8	IO	259	E19		
RTAX_B2_JO89PB2F8	IO	260	F19		
RTAX_B2_JO87NB2F8	IO	261	E21		
RTAX_B2_JO87PB2F8	IO	262	D21		
RTAX_VCCA_1.5V		263			
GND		264			
GND		265			
NOT CONNECTED		266			
NOT CONNECTED		267			
NOT CONNECTED		268			
RTAX_B1_JO73NB1F6	IO	269	A18		
RTAX_B1_JO73PB1F6	IO	270	B18		
RTAX_B1_JO74NB1F6	IO	271	D17		
RTAX_B1_JO74PB1F6	IO	272	D18		
RTAX_VCCI_B1		273			
GND		274			
RTAX_B1_JO69NB1F6	IO	275	A16		
RTAX_B1_JO69PB1F6	IO	276	A17		
RTAX_B1_JO71NB1F6	IO	277	B16		
RTAX_B1_JO71PB1F6	IO	278	B17		
RTAX_VCCA_1.5V		279			
GND		280			
RTAX_B1_JO70NB1F6	IO	281	D14		
RTAX_B1_JO70PB1F6	IO	282	D15		
RTAX_B1_JO65NB1F6	IO	283	A14		
RTAX_B1_JO65PB1F6	IO	284	A15		
RTAX_VCCI_B1		285			
GND		286			
RTAX_B1_JO68NB1F6	IO	287	B13		
RTAX_B1_JO68PB1F6	IO	288	A13		
RTAX_B1_JO66NB1F6	IO	289	D12		
RTAX_B1_JO66PB1F6	IO	290	D13		

\*\* Refer to the "User I/O Naming Convention" section on page 18 for the Net Name convention.

**Table 12. RTAX-S Prototyping Adaptor Pin Mapping Table (continued)**

Net name**	Signal Group	RTAX250S, RTAX1000S, RTAX 2000S	A3PE3000	Net name**	Signal Group	RTAX250S, RTAX1000S, RTAX 2000S	A3PE3000
		Pin number	Pin Number			Pin number	Pin Number
RTAX_VCCA_1.5V		291		GND		322	
GND		292		RTAX_B0_IO38NB0F3	IO	323	B9
NOT CONNECTED		293		RTAX_B0_IO38PB0F3	IO	324	A9
NOT CONNECTED		294		RTAX_B0_IO37NB0F3	IO	325	B8
RTAX_B1_IO48NB1F4	IO	295	B12	RTAX_B0_IO37PB0F3	IO	326	A8
RTAX_B1_IO48PB1F4	IO	296	A12	NOT CONNECTED		327	
RTAX_VCCI_B1		297		NOT CONNECTED		328	
GND		298		RTAX_VCCA_1.5V		329	
RTAX_B1_IO44NB1F4/HCLKDN	IO/CLKD	299	E16	GND		330	
RTAX_B1_IO44PB1F4/HCLKDP	IO/CLKD	300	D16	RTAX_B0_IO08NB0F0	IO	331	B6
NOT CONNECTED		301		RTAX_B0_IO08PB0F0	IO	332	B7
NOT CONNECTED		302		RTAX_VCCI_B0		333	
NOT CONNECTED		303		GND		334	
NOT CONNECTED		304		RTAX_B0_IO05NB0F0	IO	335	A6
RTAX_B1_IO43NB1F4/HCLKCN	IO/CLKC	305	F15	RTAX_B0_IO05PB0F0	IO	336	A7
RTAX_B1_IO43PB1F4/HCLKCP	IO/CLKC	306	E15	RTAX_B0_IO04NB0F0	IO	337	B4
NOT CONNECTED		307		RTAX_B0_IO04PB0F0	IO	338	B5
NOT CONNECTED		308		RTAX_VCCA_1.5V		339	
NOT CONNECTED		309		GND		340	
GND		310		RTAX_B0_IO01NB0F0	IO	341	A4
NOT CONNECTED		311		RTAX_B0_IO01PB0F0	IO	342	A5
NOT CONNECTED		312		RTAX_B0_IO02PB0F0 *	IO	343	C7
RTAX_B0_IO42NB0F3/HCLKBN	IO/CLKB	313	F8	RTAX_VCCI_B0		344	
RTAX_B0_IO42PB0F3/HCLKBP	IO/CLKB	314	F9	GND		345	
NOT CONNECTED		315		NOT CONNECTED		346	
NOT CONNECTED		316		RTAX_TDO (serial resistor 0 Ohm to RTAX_TDI)		347	
NOT CONNECTED		317		RTAX_TDI		348	
NOT CONNECTED		318		NOT CONNECTED		349	
RTAX_B0_IO41NB0F3/HCLKAN	IO/CLKA	319	D7	NOT CONNECTED		350	
RTAX_B0_IO41PB0F3/HCLKAP	IO/CLKA	320	E7	NOT CONNECTED		351	
RTAX_VCCI_B0		321		GND		352	

\* RTAX\_B0\_IO02PB0F0 is wired as a single line

\*\* Refer to the "User I/O Naming Convention" section on page 18 for the Net Name convention.

 – Differential pairs