I/O & VREF Bank	Pad Number Orientation	Pin/Pad Function	240-Pin PQFP (1)	652-Pin BGA	672-Pin FineLine BGA
8	1	I/O	–	J5	H9
8	2	I/O	180	J4	J8
8	3	I/O	–	J3	H3
8	4	I/O	178	J2	K3
–	5	VCCIO	VCCIO8	VCCIO8	–
–	6	VCCINT	VCCINT	VCCINT	VCCINT
–	7	GNDINT	GND	GND	GND
8	8	I/O	–	J1	J4
8	9	I/O	–	K6	K5
8	10	I/O	174	K5	J6
8	11	I/O	–	K4	L6
8	12	I/O	173	K3	J7
–	13	VCCIO	VCCIO8	VCCIO8	VCCIO8
8	14	I/O	–	K2	J3
8	15	I/O	–	K1	K8
8	16	I/O	172	L5	K6
8	17	I/O	–	L4	K4
8	18	I/O	171	L2	N5
–	19	VCCINT	VCCINT	VCCINT	VCCINT
–	20	GNDINT	GND	GND	GND
8	21	I/O	–	L1	M8
8	22	I/O	–	M5	M6
8	23	I/O	170	M4	L7
8	24	I/O	–	M3	L9
8	25	I/O, DATA6 (2)	169	L6	L8
–	26	GNDIO	GND	GND	GND
8	27	I/O	–	M2	M7
8	28	I/O	–	N6	L5
8	29	I/O	–	N5	P8
8	30	I/O	–	N3	L4
8	31	I/O, DATA7 (2)	166	M6	M10
–	32	VCCINT	VCCINT	VCCINT	VCCINT
–	33	GNDINT	GND	GND	GND
8	34	I/O	–	N2	L3
8	35	I/O	–	P6	R4
8	36	I/O, nWS (2)	164	M1	P9
8	37	I/O	–	P5	M5
8	38	I/O	163	P4	M3
–	39	VCCIO	VCCIO8	VCCIO8	VCCIO8
8	40	I/O	–	P3	P4
8	41	I/O	–	P1	M4
8	42	I/O, nRS (2)	161	N1	N10
8	43	I/O	–	R6	R3
8	44	I/O, nCS (2)	160	P2	M9
–	45	VCCINT	VCCINT	VCCINT	VCCINT
–	46	GNDINT	GND	GND	GND
–	47	VCC_CKLK4 (3)	159	R4	P10
–	48	GND_CKLK4 (3)	158	R3	R10

I/O & VREF Bank	Pad Number Orientation	Pin/Pad Function	240-Pin PQFP (1)	652-Pin BGA	672-Pin FineLine BGA
–	49	GND_CKLK4 (3)	158	R3	R10
8	50	I/O	–	R1	P5
8	51	I/O, CS (2)	157	R2	T6
8	52	I/O, DEV_CLRn (4)	156	T6	R9
–	53	GNDIO	GND	GND	GND
–	54	VCCIO	VCCIO8	VCCIO8	–
8	55	I/O, CLKLK_FB2n (5)	–	T5	T8
8	56	CLKLK_FB2p	155	T4	U8
8	57	I/O, CLK4n (6)	–	T3	R7
8	58	CLK4p	154	T2	R6
8	59	I/O, CLK2n (6)	–	T1	N9
–	60	VCCINT	VCCINT	VCCINT	VCCINT
–	61	GNDINT	GND	GND	GND
–	62	DATA0 (9), (11)	153	U4	N6
–	63	DCLK (9)	152	U3	N7
8	64	CLK2p	151	U2	N8
–	65	nCE (9)	150	U1	P6
–	66	TDI (9)	149	W1	P7
–	67	VCCIO	VCCIO7	VCCIO7	–
–	68	GND_CKLK2 (3)	147	W2	P11
–	69	GND_CKLK2 (3)	147	W2	P11
–	70	GNDINT	GND	GND	GND
–	71	VCCINT	VCCINT	VCCINT	VCCINT
–	72	VCC_CKLK2 (3)	144	W4	N11
7	73	I/O, DEV_OE (4)	143	Y5	R8
–	74	VCC_CKOUT2 (5)	142	Y1	V7
–	75	GND_CKOUT2 (5)	141	Y2	V6
–	76	CLKLK_OUT2p (7)	139	Y3	T7
7	77	I/O, CLKLK_OUT2n (6)	–	Y4	U7
–	78	VCCIO	VCCIO7	VCCIO7	VCCIO7
7	79	I/O	–	W5	D1
7	80	I/O	–	Y6	D2
7	81	I/O, LOCK2 (8)	138	AB6	U6
7	82	I/O	–	AA2	E1
7	83	I/O	–	AA3	E2
–	84	GNDINT	GND	GND	GND
–	85	VCCINT	VCCINT	VCCINT	VCCINT
7	86	I/O, LVDSTX01p	136	AA5	F1
7	87	I/O, LVDSTX01n (6)	–	AA6	F2
7	88	I/O, LOCK4 (8)	135	AC6	W7
7	89	I/O, LVDSTX02n (6)	–	AB2	G1
7	90	I/O, LVDSTX02p	–	AB3	G2
–	91	GNDIO	GND	GND	GND
7	92	I/O, LVDSTX03p	134	AB4	H1
7	93	I/O, LVDSTX03n (6)	–	AB5	H2
7	94	I/O, LVDSTX04n (6)	133	AC1	J1
7	95	I/O, LVDSTX04p	–	AC2	J2
7	96	I/O, LVDSTX05p	–	AC4	K1

I/O & VREF Bank	Pad Number Orientation	Pin/Pad Function	240-Pin PQFP (1)	652-Pin BGA	672-Pin FineLine BGA
–	97	GNDINT	GND	GND	GND
–	98	VCCINT	VCCINT	VCCINT	VCCINT
7	99	I/O, LVDSTX05n (6)	–	AC5	K2
7	100	I/O, LVDSTX06n (6)	–	AD1	L1
7	101	I/O, LVDSTX06p	–	AD2	L2
7	102	I/O, LVDSTX07p	–	AD3	M1
7	103	I/O, LVDSTX07n (6)	131	AD4	M2
–	104	VCCIO	VCCIO7	VCCIO7	VCCIO7
7	105	I/O, LVDSTX08n (6)	–	AD6	R1
7	106	I/O, LVDSTX08p	–	AE1	R2
7	107	I/O	130	AA1	R5
7	108	I/O, LVDSTX09p	–	AE3	T1
7	109	I/O, LVDSTX09n (6)	129	AE4	T2
–	110	GNDINT	GND	GND	GND
–	111	VCCINT	VCCINT	VCCINT	VCCINT
7	112	I/O, LVDSTX10n (6)	–	AE6	U1
7	113	I/O, LVDSTX10p	–	AF1	U2
7	114	I/O, LVDSTX11p	126	AF2	V1
7	115	I/O, LVDSTX11n (6)	–	AF3	V2
7	116	I/O, LVDSTX12n (6)	–	AF5	W1
–	117	GNDIO	GND	GND	GND
7	118	I/O, LVDSTX12p	125	AF6	W2
7	119	I/O, LVDSTX13p	–	AH1	Y1
7	120	I/O, LVDSTX13n (6)	124	AG2	Y2
7	121	I/O, LVDSTX14n (6)	–	AG4	AA1
7	122	I/O, LVDSTX14p	123	AG5	AA2
–	123	GNDINT	GND	GND	GND
–	124	VCCINT	VCCINT	VCCINT	VCCINT
7	125	I/O, LVDSTX15p	–	AG6	AB1
7	126	I/O, LVDSTX15n (6)	–	AJ1	AB2
7	127	I/O, LVDSTX16n (6)	121	AK1	AC1
7	128	I/O, LVDSTX16p	–	AH3	AC2
–	129	VCCIO	VCCIO7	VCCIO7	VCCIO7
7	130	I/O	119	AB1	T5
7	131	I/O	–	AD5	T3
7	132	I/O	–	AE5	U5
7	133	I/O	118	AF4	T4
7	134	I/O	–	AG3	U4
7	135	I/O	–	AH2	W4
7	136	I/O	–	AH5	U3
7	137	I/O	117	AH6	V3
7	138	I/O	–	AJ2	W5
7	139	I/O	–	AL1	W6
–	140	GNDIO	GND	GND	GND
7	141	I/O	116	AK2	V5
7	142	I/O	115	AJ3	V4
7	143	I/O	–	AJ4	W3
7	144	I/O	–	AJ5	Y5

I/O & VREF Bank	Pad Number Orientation	Pin/Pad Function	240-Pin PQFP (1)	652-Pin BGA	672-Pin FineLine BGA
7	145	I/O	–	AJ6	AB5
7	146	I/O	–	AM1	AA5
7	147	I/O	114	AK3	Y6
7	148	I/O	–	AK4	AA6
7	149	I/O	–	AK5	AA7
7	150	I/O	113	AK6	AB6
–	151	VCCIO	VCCIO7	VCCIO7	VCCIO7
–	152	VCCIO	VCCIO6	VCCIO6	VCCIO6
6	153	I/O	112	AP7	AB4
6	154	I/O	111	AR6	AA4
6	155	I/O	–	AM10	AC5
6	156	I/O	–	AN9	Y4
6	157	I/O	–	AL11	AB3
6	158	I/O	–	AP8	AD4
6	159	I/O	110	AR7	AA3
6	160	I/O	–	AM11	AD5
6	161	I/O	109	AN10	AB7
6	162	I/O	–	AP9	Y7
–	163	GNDIO	GND	GND	GND
–	164	VCCINT	VCCINT	VCCINT	VCCINT
–	165	VCCINT	VCCINT	VCCINT	VCCINT
–	166	GNDINT	GND	GND	GND
–	167	GNDINT	GND	GND	GND
6	168	I/O	105	AR8	AC6
6	169	I/O	–	AN11	AD6
6	170	I/O	–	AP10	AB8
6	171	I/O	104	AR9	V8
6	172	I/O	–	AL13	T9
6	173	I/O	103	AM13	AA9
6	174	I/O	–	AN12	AA8
6	175	I/O	–	AP11	Y8
6	176	I/O	102	AL14	Y9
6	177	I/O	–	AR10	W9
–	178	VCCIO	VCCIO6	VCCIO6	VCCIO6
6	179	I/O	101	AN13	AB9
6	180	I/O	–	AP12	W10
6	181	I/O	–	AM14	Y10
6	182	I/O	100	AR11	AA10
6	183	I/O	–	AL15	AB11
6	184	I/O	–	AN14	V11
6	185	I/O	–	AP13	AB10
6	186	I/O	–	AR12	AA11
6	187	I/O	99	AR13	Y11
6	188	I/O	–	AM15	W11
–	189	GNDIO	GND	GND	GND
6	190	I/O	98	AN15	V12
6	191	I/O	–	AL16	W12
–	192	VCCIO	VCCIO6	VCCIO6	VCCIO6

I/O & VREF Bank	Pad Number Orientation	Pin/Pad Function	240-Pin PQFP (1)	652-Pin BGA	672-Pin FineLine BGA
6	193	I/O	–	AP14	Y12
6	194	I/O	96	AR14	T13
6	195	I/O	–	AP15	W14
6	196	I/O	–	AR15	U13
6	197	I/O	95	AM16	U12
6	198	I/O	–	AN16	W13
6	199	I/O	94	AP16	AB12
6	200	I/O	–	AR16	V13
–	201	CONF_DONE (9)	93	AM17	AA12
–	202	nSTATUS (9)	92	AN17	AA13
5	203	FAST4	91	AP17	Y13
–	204	VCCIO	VCCIO5	VCCIO5	VCCIO5
–	205	VCCINT	VCCINT	VCCINT	VCCINT
–	206	VCCINT	VCCINT	VCCINT	VCCINT
–	207	GNDINT	GND	GND	GND
–	208	GNDINT	GND	GND	GND
5	209	FAST3	88	AP19	Y14
–	210	TCK (9)	87	AN19	AA14
–	211	TMS(9)	86	AM19	AA15
5	212	I/O	–	AR20	AB13
5	213	I/O	85	AP20	V14
5	214	I/O	–	AN20	AB14
5	215	I/O	84	AM20	Y15
5	216	I/O	–	AR21	U14
5	217	I/O	–	AP21	V15
5	218	I/O	–	AR22	AB15
5	219	I/O	83	AP22	W15
5	220	I/O	82	AL20	AB16
5	221	I/O	–	AN21	T14
–	222	GNDIO	GND	GND	GND
5	223	I/O	–	AM21	AA16
5	224	I/O	81	AR23	Y16
5	225	I/O	–	AR24	W16
5	226	I/O	80	AP23	U15
5	227	I/O	–	AN22	AB17
5	228	I/O	79	AL21	V16
5	229	I/O	–	AR25	AA17
5	230	I/O	–	AM22	AB18
5	231	I/O	–	AP24	Y17
5	232	I/O	77	AN23	AA18
–	233	VCCIO	VCCIO5	VCCIO5	VCCIO5
5	234	I/O	–	AR26	W17
5	235	I/O	–	AL22	Y18
5	236	I/O	–	AP25	W18
5	237	I/O	–	AN24	AA19
5	238	I/O	76	AM23	Y19
5	239	I/O	–	AL23	AD22
5	240	I/O	75	AR27	W20

I/O & VREF Bank	Pad Number Orientation	Pin/Pad Function	240-Pin PQFP (1)	652-Pin BGA	672-Pin FineLine BGA
5	241	I/O	–	AP26	Y20
5	242	I/O	–	AN25	AB20
5	243	I/O	74	AR28	AB19
–	244	VCCINT	VCCINT	VCCINT	VCCINT
–	245	VCCINT	VCCINT	VCCINT	VCCINT
–	246	GNDINT	GND	GND	GND
–	247	GNDINT	GND	GND	GND
–	248	GNDIO	GND	GND	GND
5	249	I/O	71	AP27	AD23
5	250	I/O	–	AN26	AA20
5	251	I/O	–	AM25	AB24
5	252	I/O	70	AR29	AC22
5	253	I/O	–	AP28	AC21
5	254	I/O	–	AL25	Y23
5	255	I/O	–	AN27	Y24
5	256	I/O	–	AM26	AA23
5	257	I/O	69	AR30	AA24
5	258	I/O	68	AP29	AB23
–	259	VCCIO	VCCIO5	VCCIO5	VCCIO5
–	260	VCCIO	VCCIO4	VCCIO4	VCCIO4
4	261	I/O	–	AL33	AA21
4	262	I/O	–	AK30	Y22
4	263	I/O	–	AK31	AB21
4	264	I/O	66	AK32	U19
4	265	I/O	–	AL34	AB22
4	266	I/O	–	AM35	V19
4	267	I/O	–	AJ30	T18
4	268	I/O	–	AJ31	W21
4	269	I/O	65	AJ32	V20
4	270	I/O	64	AJ33	V21
–	271	GNDIO	GND	GND	GND
4	272	I/O	–	AK34	Y21
4	273	I/O	–	AL35	W22
4	274	I/O	63	AJ34	AA22
4	275	I/O	–	AH30	U20
4	276	I/O	–	AH32	R17
4	277	I/O	–	AH33	W23
4	278	I/O	62	AK35	T19
4	279	I/O	–	AH34	U21
4	280	I/O	–	AJ35	P17
4	281	I/O	61	AG30	R18
–	282	VCCIO	VCCIO4	VCCIO4	VCCIO4
4	283	I/O	–	AG31	W24
4	284	I/O	59	AG32	T20
4	285	I/O	–	AG33	V24
4	286	I/O	58	AG34	N16
–	287	VCCINT	VCCINT	VCCINT	VCCINT
–	288	GNDINT	GND	GND	GND

I/O & VREF Bank	Pad Number Orientation	Pin/Pad Function	240-Pin PQFP (1)	652-Pin BGA	672-Pin FineLine BGA
4	289	I/O	–	AG35	V22
4	290	I/O	–	AF30	R19
4	291	I/O	57	AF31	V23
4	292	I/O	–	AF32	P18
4	293	I/O	55	AF33	N17
–	294	GNDIO	GND	GND	GND
4	295	I/O	–	AF34	T21
4	296	I/O	–	AF35	R21
4	297	I/O	54	AE30	U22
4	298	I/O	–	AE31	R20
4	299	I/O	53	AE32	P22
–	300	VCCINT	VCCINT	VCCINT	VCCINT
–	301	GNDINT	GND	GND	GND
4	302	I/O	–	AE34	N18
4	303	I/O	–	AE35	U23
4	304	I/O	50	AD30	N19
4	305	I/O	–	AD31	N22
4	306	I/O	49	AD32	L20
–	307	VCCIO	VCCIO4	VCCIO4	VCCIO4
4	308	I/O	–	AD33	M17
4	309	I/O	–	AD34	T22
4	310	I/O	48	AD35	M18
4	311	I/O	–	AC30	T23
4	312	I/O	47	AC31	R23
–	313	VCCINT	VCCINT	VCCINT	VCCINT
–	314	GNDINT	GND	GND	GND
4	315	I/O	–	AC33	U24
4	316	I/O	–	AC34	R24
4	317	I/O	46	AC35	T24
4	318	I/O	–	AB30	M21
4	319	I/O	–	AB31	M24
–	320	VCCIO	VCCIO4	VCCIO4	–
–	321	GNDIO	GND	GND	GND
4	322	I/O	44	AB32	M22
4	323	I/O	43	AB33	R22
4	324	I/O	41	AB34	M23
4	325	I/O	–	AB35	L22
4	326	I/O, LOCK1 (8)	40	AA30	L21
–	327	VCCINT	VCCINT	VCCINT	VCCINT
–	328	GNDINT	GND	GND	GND
4	329	I/O	–	AA32	L23
4	330	I/O	–	AA33	L24
4	331	I/O	–	AA34	N23
–	332	VCC_CKLK1 (3)	37	AA35	AF18
–	333	GND_CKLK1 (3)	36	Y30	AE18
–	334	GND_CKLK1 (3)	36	Y30	AE18
–	335	VCCIO	VCCIO4	VCCIO4	VCCIO4
4	336	I/O, CLKLK_FB1n (6)	–	Y31	AF20

I/O & VREF Bank	Pad Number Orientation	Pin/Pad Function	240-Pin PQFP (1)	652-Pin BGA	672-Pin FineLine BGA
4	337	CLKLK_FB1p	35	Y32	AE20
4	338	I/O, CLK3n (6)	–	Y33	M20
4	339	CLK3p	34	Y34	M19
4	340	I/O, CLK1n (6)	–	Y35	P19
–	341	VCCINT	VCCINT	VCCINT	VCCINT
–	342	GNDINT	GND	GND	GND
–	343	nCONFIG (9)	33	W32	P21
–	344	CLKLK_ENA (9), (10)	32	W33	P16
4	345	CLK1p	31	W34	P20
–	346	MSEL1 (9)	30	W35	N20
–	347	MSEL0 (9)	29	U35	N21
–	348	GNDINT	GND	GND	GND
–	349	VCCINT	VCCINT	VCCINT	VCCINT
–	350	VCC_CKOUT1 (5)	25	U33	AF22
–	351	GND_CKOUT1 (5)	24	U32	AE22
–	352	CLKLK_OUT1p (7)	23	U31	AE23
3	353	I/O, CLKLK_OUT1n (6)	–	T35	AF23
–	354	VCC_CKLK3 (3)	22	T34	AC26
–	355	GNDIO	GND	GND	GND
–	356	GND_CKLK3 (3)	21	V35	N25
–	357	GND_CKLK3 (3)	21	T33	AC25
3	358	I/O	–	T32	AB25
3	359	I/O	–	T31	AB26
3	360	I/O	–	T30	L19
3	361	I/O	–	R35	J24
–	362	GNDINT	GND	GND	GND
–	363	VCCINT	VCCINT	VCCINT	VCCINT
3	364	I/O, LVDSRX01p	–	R33	AA25
3	365	I/O, LVDSRX01n (6)	–	R32	AA26
3	366	I/O, LOCK3 (8)	20	R31	L18
3	367	I/O, LVDSRX02n (6)	–	R30	Y25
3	368	I/O, LVDSRX02p	–	P35	Y26
–	369	VCCIO	VCCIO3	VCCIO3	VCCIO3
3	370	I/O, LVDSRX03p	18	P34	W25
3	371	I/O, LVDSRX03n (6)	–	P33	W26
3	372	I/O, LVDSRX04n (6)	17	P31	V25
3	373	I/O, LVDSRX04p	–	P30	V26
3	374	I/O, LVDSRX05p	16	N34	U25
–	375	GNDINT	GND	GND	GND
–	376	VCCINT	VCCINT	VCCINT	VCCINT
3	377	I/O, LVDSRX05n (6)	–	N33	U26
3	378	I/O, LVDSRX06n (6)	–	N31	T25
3	379	I/O, LVDSRX06p	13	N30	T26
3	380	I/O, LVDSRX07p	–	M35	R25
3	381	I/O, LVDSRX07n (6)	–	M34	R26
–	382	GNDIO	GND	GND	GND
–	383	VCCIO	VCCIO3	VCCIO3	–
3	384	I/O, LVDSRX08n (6)	11	M32	M25

I/O & VREF Bank	Pad Number Orientation	Pin/Pad Function	240-Pin PQFP (1)	652-Pin BGA	672-Pin FineLine BGA
3	385	I/O, LVDSRX08p	–	M31	M26
3	386	I/O	10	P32	J23
3	387	I/O, LVDSRX09p	–	L35	L25
3	388	I/O, LVDSRX09n (6)	–	L34	L26
–	389	GNDINT	GND	GND	GND
–	390	VCCINT	VCCINT	VCCINT	VCCINT
3	391	I/O, LVDSRX10n (6)	9	L32	K25
3	392	I/O, LVDSRX10p	–	L31	K26
3	393	I/O, LVDSRX11p	8	L30	J25
3	394	I/O, LVDSRX11n (6)	–	K35	J26
3	395	I/O, LVDSRX12n (6)	–	K33	H25
–	396	VCCIO	VCCIO3	VCCIO3	VCCIO3
3	397	I/O, LVDSRX12p	–	K32	H26
3	398	I/O, LVDSRX13p	–	K30	G25
3	399	I/O, LVDSRX13n (6)	7	J35	G26
3	400	I/O, LVDSRX14n (6)	–	J34	F25
3	401	I/O, LVDSRX14p	–	J33	F26
–	402	GNDINT	GND	GND	GND
–	403	VCCINT	VCCINT	VCCINT	VCCINT
3	404	I/O, LVDSRX15p	4	J32	E25
3	405	I/O, LVDSRX15n (6)	–	J31	E26
3	406	I/O, LVDSRX16n (6)	3	G35	D25
3	407	I/O, LVDSRX16p	2	H34	D26
–	408	VCCIO	VCCIO3	VCCIO3	–
–	409	GNDIO	GND	GND	GND
3	410	I/O	239	N32	K21
3	411	I/O	–	M33	K23
3	412	I/O	238	L33	K20
3	413	I/O	–	K34	K22
3	414	I/O	–	H35	K24
3	415	I/O	–	J30	H24
3	416	I/O	237	H33	K19
3	417	I/O	–	H32	J20
3	418	I/O	–	H31	G22
3	419	I/O	–	H30	H20
–	420	VCCIO	VCCIO3	VCCIO3	VCCIO3
3	421	I/O	236	G34	H22
3	422	I/O	–	E35	J22
3	423	I/O	235	F34	G24
3	424	I/O	–	G33	H21
3	425	I/O	–	G32	G21
3	426	I/O	234	G31	J21
3	427	I/O	–	D35	F22
3	428	I/O	233	E34	G20
3	429	I/O	–	F33	F21
3	430	I/O	–	F32	E22
–	431	GNDIO	GND	GND	GND
2	432	I/O	232	B29	E23

I/O & VREF Bank	Pad Number Orientation	Pin/Pad Function	240-Pin PQFP (1)	652-Pin BGA	672-Pin FineLine BGA
2	433	I/O	–	A30	D22
2	434	I/O	–	D26	F24
2	435	I/O	231	C27	E24
2	436	I/O	–	E25	H23
2	437	I/O	–	B28	G23
2	438	I/O	230	A29	F23
2	439	I/O	–	D25	E21
2	440	I/O	–	C26	F20
2	441	I/O	–	B27	D21
–	442	VCCIO	VCCIO2	VCCIO2	VCCIO2
–	443	GNDINT	GND	GND	GND
–	444	GNDINT	GND	GND	GND
–	445	VCCINT	VCCINT	VCCINT	VCCINT
–	446	VCCINT	VCCINT	VCCINT	VCCINT
–	447	GNDINT	–	–	–
2	448	I/O	226	A28	E20
2	449	I/O	–	C25	J19
2	450	I/O	225	B26	G19
2	451	I/O	–	A27	F19
2	452	I/O	–	E23	E19
2	453	I/O	–	D23	K18
2	454	I/O	224	C24	D20
2	455	I/O	–	B25	H18
2	456	I/O	223	E22	G18
2	457	I/O	–	A26	D19
–	458	GNDIO	GND	GND	GND
2	459	I/O	222	C23	E18
2	460	I/O	–	B24	F18
2	461	I/O	221	D22	E17
2	462	I/O	–	A25	F17
2	463	I/O	–	E21	G17
2	464	I/O	220	C22	H17
2	465	I/O	–	B23	F16
2	466	I/O	219	A24	J17
2	467	I/O	–	A23	E16
2	468	I/O	–	D21	G16
–	469	VCCIO	VCCIO2	VCCIO2	VCCIO2
2	470	I/O	–	C21	H16
2	471	I/O	–	E20	E15
2	472	I/O	–	B22	F15
2	473	I/O	217	A22	E14
2	474	I/O	–	B21	H15
2	475	I/O	216	A21	E13
2	476	I/O	–	D20	L14
2	477	I/O	215	C20	G15
2	478	I/O	–	B20	K15
2	479	I/O	–	A20	J16
–	480	TRST (9)	214	D19	F14

I/O & VREF Bank	Pad Number Orientation	Pin/Pad Function	240-Pin PQFP (1)	652-Pin BGA	672-Pin FineLine BGA
–	481	NCEO	213	C19	G14
1	482	FAST1	212	B19	H14
–	483	GNDINT	GND	GND	GND
–	484	GNDINT	GND	GND	GND
–	485	VCCINT	VCCINT	VCCINT	VCCINT
–	486	VCCINT	VCCINT	VCCINT	VCCINT
–	487	GNDIO	GND	GND	GND
1	488	FAST2	209	B17	F13
–	489	TDO (9)	208	C17	G13
–	490	GNDINT	–	GND	GND
1	491	I/O	–	A16	H13
1	492	I/O	207	B16	F12
1	493	I/O, INITDONE (4)	206	C16	J15
1	494	I/O	–	D16	E12
1	495	I/O	–	A15	E11
1	496	I/O	–	B15	J13
1	497	I/O, RDYnBSY (2)	205	A14	J14
1	498	I/O	–	B14	H12
1	499	I/O	–	E16	E10
1	500	I/O, CLKUSR (2)	204	C15	K14
–	501	VCCIO	VCCIO1	VCCIO1	VCCIO1
1	502	I/O	–	D15	F11
1	503	I/O	–	A13	G12
1	504	I/O	203	A12	G11
1	505	I/O	–	B13	E9
1	506	I/O	–	C14	D10
1	507	I/O	202	E15	F9
1	508	I/O	–	A11	D9
1	509	I/O	201	D14	K12
1	510	I/O	–	B12	H11
1	511	I/O, DATA1 (2)	200	C13	K13
–	512	GNDIO	GND	GND	GND
1	513	I/O	–	A10	D8
1	514	I/O	–	E14	E8
–	515	VCCIO	VCCIO1	VCCIO1	–
1	516	I/O	–	B11	F8
1	517	I/O	198	C12	E7
1	518	I/O	–	D13	G10
1	519	I/O	197	E13	H10
1	520	I/O	–	A9	J11
1	521	I/O	196	B10	D7
1	522	I/O	–	C11	D6
1	523	I/O, DATA2 (2)	195	A8	J12
–	524	GNDINT	GND	GND	GND
–	525	GNDINT	GND	GND	GND
–	526	VCCINT	VCCINT	VCCINT	VCCINT
–	527	VCCINT	VCCINT	VCCINT	VCCINT
–	528	VCCIO	VCCIO1	VCCIO1	VCCIO1

I/O & VREF Bank	Pad Number Orientation	Pin/Pad Function	240-Pin PQFP (1)	652-Pin BGA	672-Pin FineLine BGA
1	529	I/O	–	B9	F7
1	530	I/O	–	C10	E6
1	531	I/O	192	D11	C7
1	532	I/O	–	A7	C6
1	533	I/O	191	B8	C5
1	534	I/O	–	E11	B5
1	535	I/O	190	C9	A5
1	536	I/O, DATA3 (2)	189	B7	F10
8	537	I/O	–	F6	C4
8	538	I/O	–	F5	E5
–	539	GNDIO	GND	GND	GND
8	540	I/O	–	F4	E3
8	541	I/O	–	C1	F5
8	542	I/O	187	D1	F4
8	543	I/O	–	E2	E4
8	544	I/O	–	G6	F3
8	545	I/O	–	G5	D5
8	546	I/O	–	G4	G5
8	547	I/O	186	G3	G3
8	548	I/O	–	F2	G8
1	549	I/O, DATA4 (2)	185	B5	G9
–	550	VCCIO	VCCIO8	VCCIO8	VCCIO8
8	551	I/O	184	E1	G4
8	552	I/O	–	G2	G6
8	553	I/O	–	H6	H5
8	554	I/O	183	H4	G7
8	555	I/O	–	H3	H7
8	556	I/O	–	F1	H4
8	557	I/O	–	H2	H6
8	558	I/O	182	G1	K7
8	559	I/O	–	J6	J5
1	560	I/O, DATA5 (2)	181	E7	F6
–	561	GNDIO	GND	GND	GND
–	562	–	–	–	–

Pin Name	240-Pin PQFP (1)	652-Pin BGA	672-Pin FineLine BGA
MSEL0 (9)	29	U35	N21
MSEL1 (9)	30	W35	N20
nSTATUS (9)	92	AN17	AA13
nCONFIG (9)	33	W32	P21
DCLK (9)	152	U3	N7
CONF_DONE (9)	93	AM17	AA12
INIT_DONE (4)	206	C16	J15
nCE (9)	150	U1	P6
nCEO (9)	213	C19	G14
nWS (2)	164	M1	P9
nRS (2)	161	N1	N10
nCS (2)	160	P2	M9
CS (2)	157	R2	T6
RDYnBSY (2)	205	A14	J14
CLKUSR (2)	204	C15	K14
DATA7 (2)	166	M6	M10
DATA6 (2)	169	L6	L8
DATA5 (2)	181	E7	F6
DATA4 (2)	185	B5	G9
DATA3 (2)	189	B7	F10
DATA2 (2)	195	A8	J12
DATA1 (2)	200	C13	K13
DATA0 (9), (11)	153	U4	N6
TDI (9)	149	W1	P7
TDO (9)	208	C17	G13
TCK (9)	87	AN19	AA14
TMS (9)	86	AM19	AA15
TRST (9)	214	D19	F14
Dedicated Fast I/Os	212, 209, 88, 91	B19, B17, AP19, AP17	H14, F13, Y14, Y13
CLK1p	31	W34	P20
CLK2p	151	U2	N8
CLK3p	34	Y34	M19
CLK4p	154	T2	R6
LOCK1 (8)	40	AA30	L21
LOCK2 (8)	138	AB6	U6
LOCK3 (8)	20	R31	L18
LOCK4 (8)	135	AC6	W7
CLKLK_ENA (9), (10)	32	W33	P16
CLKLK_OUT1p (7)	23	U31	AE23
CLKLK_OUT2p (7)	139	Y3	T7
CLKLK_FB1p	35	Y32	AE20
CLKLK_FB2p	155	T4	U8
DEV_CLRn (4)	156	T6	R9
DEV_OE (4)	143	Y5	R8

Pin Name	240-Pin PQFP (1)	652-Pin BGA	672-Pin FineLine BGA
VCCINT	1, 5, 14, 27, 39, 52, 60, 73, 90, 107, 122, 127, 140, 145, 168, 176, 179, 193, 210, 227	A17, A19, AA31, AA4, AC3, AC32, AE2,AE33, AG1, AH31, AH35, AH4, AK33, AL12, AL2, AL24, AM12, AM24, AR17, AR19, D12, D24, E12, E24, F3, F35, G30, H1, H5, K31, L3, M30, N35, N4, R34, R5, U34, U5, W3, W31	A3, A24, B3, B8, B19, B24, C1, C2, C25, C26, D3, D24, K11, L10, L15, M13, M16, N2, N12, P15, P24, P25, R11, R14, T12, T17, U9, U16, AC3, AC24, AD1, AD2, AD25, AD26, AE3, AE8, AE19, AE24, AF3, AF24
VCCIO1	199	C4, D5, E17	A6, J10, L12
VCCIO2	229	E19, D31, C32	A13, K16, M14
VCCIO3	12	F30, F31, U30	A21, L17, N15
VCCIO4	67	W30, AL31, AL32	N24, R16, U18
VCCIO5	45	AN32, AN33, AL19	T15, V17, AF21
VCCIO6	148	AL17, AM5, AN4	R13, U11, V10, AF13
VCCIO7	97, 120	AL3, AL4, W6	P12, T10, AF6
VCCIO8	177	U6, E3, E4	K9, M11, N3
VCC_CKLK1 (3)	37	AA35	AF18
VCC_CKLK2 (3)	144	W4	N11
VCC_CKLK3 (3)	22	T34	AC26
VCC_CKLK4 (3)	159	R4	P10
VCC_CKOUT1 (5)	25	U33	AF22
VCC_CKOUT2 (5)	142	Y1	V7
GND	6, 15, 19, 26, 28, 38, 42, 51, 56, 72, 78, 89, 106, 108, 128, 132, 137, 146, 162, 165, 167, 175, 188, 194, 211, 218, 228, 240	A1, A18, A35, AK18, AL18, AL30, AL5, AL6, AM18, AM2, AM3, AM31, AM32, AM33, AM34, AM4, AN1, AN18, AN2, AN3, AN34, AN35, AP1, AP18, AP2, AP34, AP35, AR1, AR18, AR35, B1, B18, B2, B34, B35, C18, C2, C3, C33, C34, C35, D18, D2, D3, D17, D32, D33, D34, D4, E18, E30, E31, E32, E33, E5, E6, F18, V1, V2, V3, V30, V31, V32, V33, V34, V4, V5, V6	A2, A8, A14, A19, A25, B1, B2, B6, B21, B25, B26, C3, C13, C24, D4, D23, H8, H19, J9, J18, K10, K17, L11, L13, L16, M12, M15, N1, N4, N13, N14, N26, P1, P2, P3, P13, P14, P23, P26, R12, R15, T11, T16, U10, U17, V9, V18, W8, W19, AC4, AC23, AD3, AD13, AD24, AE1, AE2, AE6, AE21, AE25, AE26, AF2, AF8, AF14, AF19, AF25
GND_CKLK1 (3)	36	Y30	AE18
GND_CKLK2 (3)	147	W2	P11
GND_CKLK3 (3)	21	V35, T33	N25, AC25
GND_CKLK4 (3)	158	R3	R10
GND_CKOUT1 (5)	24	U32	AE22
GND_CKOUT2 (5)	141	Y2	V6

Pin Name	**240-Pin PQFP** (1)	**652-Pin BGA**	**672-Pin FineLine BGA**
No Connect (N.C.)		A2, A3, A31, A32, A33, A34, A4, A5, A6, AL10, AL26, AL27, AL28, AL29, AL7, AL8, AL9, AM27, AM28, AM29, AM30, AM6, AM7, AM8, AM9, AN28, AN29, AN30, AN31, AN5, AN6, AN7, AN8, AP3, AP30, AP31, AP32, AP33, AP4, AP5, AP6, AR2, AR3, AR31, AR32, AR33, AR34, AR4, AR5, B3, B30, B31, B32, B33, B4, B6, C28, C29, C30, C31, C5, C6, C7, C8, D10, D27, D28, D29, D30, D6, D7, D8, D9, E10, E26, E27, E28, E29, E8, E9	A10, A11, A12, A15, A16, A17, A18, A20, A22, A23, A7, A9, AC10, AC11, AC12, AC13, AC14, AC15, AC16, AC17, AC18, AC19, AC20, AC7, AC8, AC9, AD10, AD11, AD12, AD14, AD15, AD16, AD17, AD18, AD19, AD20, AD21, A4,A D7, AD8, AD9, AE10, AE11, AE12, AE13, AE14, AE15, AE16, AE17, AE4, AE5, AE7, AE9, AF10, AF11, AF12, AF15, AF16, AF17, AF4, AF5, AF7, AF9, B10, B11, B12, B13, B14, B15, B16, B17, B18, B20, B22, B23, B7, B9, C10, C11, C12, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, B4, C8, C9, D11, D12, D13, D14, D15, D16, D17, D18, Y3
Total User I/O Pins (12)	152	408	408

Notes:

(1) For the 240-pin PQFP packages, four unique VCCIO levels are supported. The VCCIO pins for I/O banks 1 and 8 must be at the same level. The VCCIO pins for banks 6 and 7 must be at the same level. The VCCIO pins for I/O banks 4 and 5 must be at the same level. The VCCIO pins for I/O banks 2 and 3 must be at the same level. However, unique VREF settings are supported for each of the eight I/O banks.

(2) This pin can be used as a user I/O pin after configuration.

(3) This pin is the power or ground for the ClockLock and ClockBoost circuitry. To ensure noise resistance, the power and ground supply to the ClockLock and ClockBoost circuitry should be isolated from the power and ground to the rest of the device. VCC_CKLK has the same voltage specifications as the VCCINT and should be connected to a 1.8-V power supply. If the ClockLock or ClockBoost circuitry is not used, this power or ground pin should be connected to VCCINT or GNDINT, respectively.

(4) This pin can be used as a user I/O pin if it is not used for its device-wide or configuration function.

(5) This pin is the power or ground for the external output of a PLL. These pins should be set to the VCCIO level/standard desired for the external clock ouput. To ensure noise resistance, the power and ground supply to the PLL external output should be isolated from the power and ground to the rest of the VCCIO and GNDIO pins. If the PLL or external output is not used, this power or ground pin should be connected to VCCIO or GNDIO, respectively.

(6) This pin is the complementary signal for the LVDS pair on dedicated inputs and outputs that can be configured for the LVDS standard. If not used for the LVDS pair, these pins are regular I/O pins. Pins with the "n" suffix carry the negative signal for the LVDS channel. Pins with a "p" suffix carry the positive signal for the LVDS channel.

(7) The CLKLK_OUT pin is powered by the VCC_CKOUT and GND_CKOUT pins.

(8) This pin shows the status of the ClockLock and ClockBoost circuitry. When the ClockLock and ClockBoost circuitry is locked to the incoming clock and generates an internal clock, LOCK is driven high. LOCK remains high if a periodic clock stops clocking. The LOCK function is optional; if the LOCK output is not used, this pin is a user I/O pin.

(9) This pin is a dedicated pin; it is not available as a user I/O pin.

(10) This pin is the active high enable pin for all of the PLL circuits in the device. When de-asserted, all PLLs are reset to their default, unlocked state and will stop clocking. Once re-asserted, the PLLs will lock again and start clocking. If this pin function is not needed, the pin should be connected to VCCINT.

(11) This pin is tri-stated in user mode.

(12) The user I/O pin count includes dedicated fast I/O pins and dedicated clock inputs. It does not include the dedicated clock feedback and output pins.