Dedicated Pin	**100-Pin TQFP**	**144-Pin TQFP**	**169-Pin Ultra FineLine BGA**	**208-Pin PQFP** (1)	**256-Pin FineLine BGA**
INPUT/GCLK1	87	125	D8	184	D9
INPUT/GCLRn	89	127	D6	182	E8
INPUT/OE1	88	126	D7	183	E9
INPUT/OE2/GCLK2	90	128	E7	181	D8
TDI (2)	4	4	E4	176	D4
TMS (2)	15	20	J4	127	J6
TCK (2)	62	89	J10	30	J11
TDO (2)	73	104	E10	189	D13
VREFA (3)	12	14	G4	128	J4
VREFB (3)	60	87	H10	22	H11
GNDINT	38, 86	52, 57, 124, 129	A7, E8, J7, N7	75, 82, 180, 185	A8, C9, G9, K8, P9
GNDIO (3)	11, 26, 43, 59, 74, 95	3, 13, 17, 33, 59, 64, 85, 105, 135	A3, A12, E1, F5, F13, H1, H9, J13, N2, N11	14, 32, 50, 51, 72, 94, 116, 134, 152, 158, 174, 200	A3, B10, C2, D14, F6, G10, H8, J9, K7, L11, M3, P6, P10, R2, R3, T1, T15
VCCINT (2.5 V Only)	39, 91	51, 58, 123, 130	B7, E6, H7, M7	74, 83, 179, 186	B9, C8, G8, K9, P8
VCCIO1 (1.8 V, 2.5 V, or 3.3 V)	3, 18, 34	24, 50, 144	A2, F1, H5, J1, N3	85, 105, 107, 125, 143, 165	B3, B5, G3, G7, J8, L3, L6, T2, T3
VCCIO2 (1.8 V, 2.5 V, or 3.3 V)	51, 66, 82	73, 76, 95, 115	A11, E13, F9, H13, N12	5, 23, 41, 63, 191, 207	C14, E15, F11, G15, H9, K10, M15, P14
No Connect (N.C.)	–	–	–	1, 2, 52, 53, 54, 103, 104, 106, 155, 156, 157, 208	A1, A2, A6, A12, A13, A14, A15, A16, B1, B2, B15, B16, C1, C15, C16, D1, D3, D15, D16, G1, G16, H15, H16, J1, K1, L1, L2, M1, M16, N1, N2, N14, N15, N16, P1, P2, P15, P16, R1, R14, R15, R16, T7, T8, T10, T11, T14, T16
Total User I/O Pins (4)	84	120	141	164	164

Lab	MC	100-Pin TQFP	IOVCC Group for 100-Pin TQFP	IOVCC Group for 100-Pin TQFP	144-Pin TQFP	IOGND Group for 144-Pin TQFP (200 mA)	IOVCC Group for 144-Pin TQFP	I/O Bank
A	1	–	–	–	–	–	–	1
A	2	–	–	–	–	–	–	1
A	3	–	–	–	2	B	B (200 mA)	1
A	4	–	–	–	–	–	–	1
A	5	–	–	–	1	B	B (200 mA)	1
A	6	–	–	–	143	B	A (100 mA)	1
A	7	–	–	–	–	–	–	1
A	8	2	B	A (100 mA)	–	–	–	1
A	9	1	B	A (100 mA)	–	–	–	1
A	10	–	–	–	–	–	–	1
A	11	100	B	A (100 mA)	142	B	A (100 mA)	1
A	12	–	–	–	–	–	–	1
A	13	–	–	–	141	B	A (100 mA)	1
A	14	99	B	A (100 mA)	140	B	A (100 mA)	1
A	15	–	–	–	–	–	–	1
A	16	98	B	A (100 mA)	139	B	A (100 mA)	1
B	17	–	–	–	–	–	–	1
B	18	–	–	–	–	–	–	1
B	19	–	–	–	10	C	B (200 mA)	1
B	20	–	–	–	–	–	–	1
B	21	–	–	–	9	C	B (200 mA)	1
B	22	–	–	–	–	–	–	1
B	23	–	–	–	–	–	–	1
B	24	8	B	B (200 mA)	8	C	B (200 mA)	1
B	25	7	B	B (200 mA)	7	C	B (200 mA)	1
B	26	–	–	–	–	–	–	1
B	27	6	B	B (200 mA)	6	C	B (200 mA)	1
B	28	–	–	–	–	–	–	1
B	29	5	B	B (200 mA)	5	C	B (200 mA)	1
B	30	–	–	–	–	–	–	1
B	31	–	–	–	–	–	–	1
B	32	4 (1)	B	B (200 mA)	4 (1)	C	B (200 mA)	1
C	33	–	–	–	36	E	C (200 mA)	1
C	34	–	–	–	–	–	–	1
C	35	–	–	–	35	E	C (200 mA)	1
C	36	–	–	–	–	–	–	1
C	37	–	–	–	34	E	C (200 mA)	1
C	38	–	–	–	–	–	–	1
C	39	–	–	–	–	–	–	1
C	40	25	C	C (200 mA)	32	D	C (200 mA)	1
C	41	24	C	C (200 mA)	31	D	C (200 mA)	1
C	42	–	–	–	–	–	–	1
C	43	23	C	C (200 mA)	30	D	C (200 mA)	1
C	44	–	–	–	–	–	–	1
C	45	22	C	C (200 mA)	29	D	C (200 mA)	1
C	46	–	–	–	–	–	–	1

Lab	MC	100-Pin TQFP	IOVCC Group for 100-Pin TQFP	IOVCC Group for 100-Pin TQFP	144-Pin TQFP	IOGND Group for 144-Pin TQFP (200 mA)	IOVCC Group for 144-Pin TQFP	I/O Bank
C	47	–	–	–	–	–	–	1
C	48	21	C	C (200 mA)	28	D	C (200 mA)	1
D	49	31	D	C (200 mA)	44	E	C (200 mA)	1
D	50	–	–	–	–	–	–	1
D	51	30	D	C (200 mA)	43	E	C (200 mA)	1
D	52	–	–	–	–	–	–	1
D	53	29	D	C (200 mA)	42	E	C (200 mA)	1
D	54	28	D	C (200 mA)	41	E	C (200 mA)	1
D	55	–	–	–	–	–	–	1
D	56	–	–	–	40	E	C (200 mA)	1
D	57	–	–	–	–	–	–	1
D	58	–	–	–	–	–	–	1
D	59	–	–	–	39	E	C (200 mA)	1
D	60	–	–	–	–	–	–	1
D	61	–	–	–	38	E	C (200 mA)	1
D	62	–	–	–	–	–	–	1
D	63	–	–	–	–	–	–	1
D	64	27	D	C (200 mA)	37	E	C (200 mA)	1
E	65	–	–	–	–	–	–	1
E	66	–	–	–	–	–	–	1
E	67	–	–	–	–	–	–	1
E	68	–	–	–	–	–	–	1
E	69	–	–	–	138	B	A (100 mA)	1
E	70	–	–	–	–	–	–	1
E	71	–	–	–	–	–	–	1
E	72	97	B	A (100 mA)	137	B	A (100 mA)	1
E	73	96	B	A (100 mA)	136	B	A (100 mA)	1
E	74	–	–	–	–	–	–	1
E	75	94	A	A (100 mA)	134	A	A (100 mA)	1
E	76	–	–	–	–	–	–	1
E	77	93	A	A (100 mA)	133	A	A (100 mA)	1
E	78	–	–	–	132	A	A (100 mA)	1
E	79	–	–	–	–	–	–	1
E	80	92	A	A (100 mA)	131	A	A (100 mA)	1
F	81	–	–	–	–	–	–	1
F	82	–	–	–	–	–	–	1
F	83	–	–	–	19	D	B (200 mA)	1
F	84	–	–	–	–	–	–	1
F	85	–	–	–	18	D	B (200 mA)	1
F	86	–	–	–	–	–	–	1
F	87	–	–	–	–	–	–	1
F	88	14	C	B (200 mA)	16	C	B (200 mA)	1
F	89	13	C	B (200 mA)	15	C	B (200 mA)	1
F	90	–	–	–	–	–	–	1
F	91	12 (2)	C	B (200 mA)	14 (2)	C	B (200 mA)	1
F	92	–	–	–	–	–	–	1

Lab	MC	100-Pin TQFP	IOVCC Group for 100-Pin TQFP	IOVCC Group for 100-Pin TQFP	144-Pin TQFP	IOGND Group for 144-Pin TQFP (200 mA)	IOVCC Group for 144-Pin TQFP	I/O Bank
F	93	10	B	B (200 mA)	12	C	B (200 mA)	1
F	94	–	–	–	–	–	–	1
F	95	–	–	–	–	–	–	1
F	96	9	B	B (200 mA)	11	C	B (200 mA)	1
G	97	–	–	–	–	–	–	1
G	98	–	–	–	–	–	–	1
G	99	–	–	–	27	D	C (200 mA)	1
G	100	–	–	–	–	–	–	1
G	101	–	–	–	26	D	C (200 mA)	1
G	102	–	–	–	–	–	–	1
G	103	–	–	–	–	–	–	1
G	104	20	C	C (200 mA)	25	D	C (200 mA)	1
G	105	19	C	C (200 mA)	23	D	B (200 mA)	1
G	106	–	–	–	–	–	–	1
G	107	17	C	B (200 mA)	22	D	B (200 mA)	1
G	108	–	–	–	–	–	–	1
G	109	16	C	B (200 mA)	21	D	B (200 mA)	1
G	110	–	–	–	–	–	–	1
G	111	–	–	–	–	–	–	1
G	112	15 (1)	C	B (200 mA)	20 (1)	D	B (200 mA)	1
H	113	37	D	D (58 mA)	–	–	–	1
H	114	–	–	–	–	–	–	1
H	115	36	D	D (58 mA)	54	E	D (58 mA)	1
H	116	–	–	–	–	–	–	1
H	117	–	–	–	53	E	D (58 mA)	1
H	118	35	D	D (58 mA)	–	–	–	1
H	119	–	–	–	–	–	–	1
H	120	–	–	–	49	E	C (200 mA)	1
H	121	–	–	–	48	E	C (200 mA)	1
H	122	–	–	–	–	–	–	1
H	123	–	–	–	47	E	C (200 mA)	1
H	124	–	–	–	–	–	–	1
H	125	33	D	C (200 mA)	46	E	C (200 mA)	1
H	126	–	–	–	–	–	–	1
H	127	–	–	–	–	–	–	1
H	128	32	D	C (200 mA)	45	E	C (200 mA)	1
I	129	80	A	G (200 mA)	114	A	H (200 mA)	2
I	130	–	–	–	–	–	–	2
I	131	81	A	G (200 mA)	116	A	I (100 mA)	2
I	132	–	–	–	–	–	–	2
I	133	–	–	–	117	A	I (100 mA)	2
I	134	–	–	–	–	–	–	2
I	135	–	–	–	–	–	–	2
I	136	–	–	–	118	A	I (100 mA)	2
I	137	–	–	–	119	A	I (100 mA)	2
I	138	–	–	–	–	–	–	2

Lab	MC	100-Pin TQFP	IOVCC Group for 100-Pin TQFP	IOVCC Group for 100-Pin TQFP	144-Pin TQFP	IOGND Group for 144-Pin TQFP (200 mA)	IOVCC Group for 144-Pin TQFP	I/O Bank
I	139	83	A	H (100 mA)	120	A	I (100 mA)	2
I	140	–	–	–	–	–	–	2
I	141	84	A	H (100 mA)	121	A	I (100 mA)	2
I	142	–	–	–	–	–	–	2
I	143	–	–	–	–	–	–	2
I	144	85	A	H (100 mA)	122	A	I (100 mA)	2
J	145	63	F	F (200 mA)	–	–	–	2
J	146	–	–	–	–	–	–	2
J	147	64	F	F (200 mA)	90	H	G (200 mA)	2
J	148	–	–	–	–	–	–	2
J	149	65	F	F (200 mA)	91	H	G (200 mA)	2
J	150	–	–	–	–	–	–	2
J	151	–	–	–	–	–	–	2
J	152	–	–	–	92	H	G (200 mA)	2
J	153	–	–	–	93	H	G (200 mA)	2
J	154	–	–	–	–	–	–	2
J	155	67	F	G (200 mA)	94	H	G (200 mA)	2
J	156	–	–	–	–	–	–	2
J	157	–	–	–	96	H	H (200 mA)	2
J	158	–	–	–	–	–	–	2
J	159	–	–	–	–	–	–	2
J	160	68	F	G (200 mA)	97	H	H (200 mA)	2
K	161	–	–	–	–	–	–	2
K	162	–	–	–	–	–	–	2
K	163	57	E	F (200 mA)	82	G	G (200 mA)	2
K	164	–	–	–	–	–	–	2
K	165	–	–	–	83	G	G (200 mA)	2
K	166	–	–	–	–	–	–	2
K	167	–	–	–	–	–	–	2
K	168	58	E	F (200 mA)	84	G	G (200 mA)	2
K	169	–	–	–	86	H	G (200 mA)	2
K	170	–	–	–	–	–	–	2
K	171	60 (2)	F	F (200 mA)	87 (2)	H	G (200 mA)	2
K	172	–	–	–	–	–	–	2
K	173	61	F	F (200 mA)	88	H	G (200 mA)	2
K	174	–	–	–	–	–	–	2
K	175	–	–	–	–	–	–	2
K	176	62 (1)	F	F (200 mA)	89 (1)	H	G (100 mA)	2
L	177	–	–	–	–	–	–	1
L	178	–	–	–	–	–	–	1
L	179	–	–	–	55	E	D (58 mA)	1
L	180	–	–	–	–	–	–	1
L	181	–	–	–	56	E	D (58 mA)	1
L	182	–	–	–	–	–	–	2
L	183	–	–	–	–	–	–	2
L	184	40	D	E (100 mA)	60	F	E (100 mA)	2

Lab	MC	100-Pin TQFP	IOVCC Group for 100-Pin TQFP	IOVCC Group for 100-Pin TQFP	144-Pin TQFP	IOGND Group for 144-Pin TQFP (200 mA)	IOVCC Group for 144-Pin TQFP	I/O Bank
L	185	41	D	E (100 mA)	61	F	E (100 mA)	2
L	186	–	–	–	–	–	–	2
L	187	42	D	E (100 mA)	62	F	E (100 mA)	2
L	188	–	–	–	–	–	–	2
L	189	44	E	E (100 mA)	63	F	E (100 mA)	2
L	190	–	–	–	–	–	–	2
L	191	–	–	–	–	–	–	2
L	192	45	E	E (100 mA)	65	G	E (100 mA)	2
M	193	–	–	–	106	A	H (200 mA)	2
M	194	–	–	–	–	–	–	2
M	195	75	A	G (200 mA)	107	A	H (200 mA)	2
M	196	–	–	–	–	–	–	2
M	197	–	–	–	108	A	H (200 mA)	2
M	198	–	–	–	–	–	–	2
M	199	–	–	–	–	–	–	2
M	200	–	–	–	109	A	H (200 mA)	2
M	201	76	A	G (200 mA)	110	A	H (200 mA)	2
M	202	–	–	–	–	–	–	2
M	203	77	A	G (200 mA)	111	A	H (200 mA)	2
M	204	–	–	–	–	–	–	2
M	205	–	–	–	–	–	–	2
M	206	78	A	G (200 mA)	112	A	H (200 mA)	2
M	207	–	–	–	–	–	–	2
M	208	79	A	G (200 mA)	113	A	H (200 mA)	2
N	209	–	–	–	–	–	–	2
N	210	–	–	–	–	–	–	2
N	211	69	F	G (200 mA)	98	H	H (200 mA)	2
N	212	–	–	–	–	–	–	2
N	213	–	–	–	99	H	H (200 mA)	2
N	214	–	–	–	–	–	–	2
N	215	–	–	–	–	–	–	2
N	216	70	F	G (200 mA)	100	H	H (200 mA)	2
N	217	–	–	–	101	H	H (200 mA)	2
N	218	–	–	–	–	–	–	2
N	219	71	F	G (200 mA)	102	H	H (200 mA)	2
N	220	–	–	–	–	–	–	2
N	221	72	F	G (200 mA)	103	H	H (200 mA)	2
N	222	–	–	–	–	–	–	2
N	223	–	–	–	–	–	–	2
N	224	73 (1)	F	G (200 mA)	104 (1)	H	H (200 mA)	2
P	225	–	–	–	–	–	–	2
P	226	–	–	–	–	–	–	2
P	227	–	–	–	74	G	F (200 mA)	2
P	228	–	–	–	–	–	–	2
P	229	–	–	–	75	G	F (200 mA)	2
P	230	–	–	–	–	–	–	2

Lab	MC	100-Pin TQFP	IOVCC Group for 100-Pin TQFP	IOVCC Group for 100-Pin TQFP	144-Pin TQFP	IOGND Group for 144-Pin TQFP (200 mA)	IOVCC Group for 144-Pin TQFP	I/O Bank
P	231	–	–	–	–	–	–	2
P	232	52	E	F (200 mA)	77	G	G (200 mA)	2
P	233	53	E	F (200 mA)	78	G	G (200 mA)	2
P	234	–	–	–	–	–	–	2
P	235	54	E	F (200 mA)	79	G	G (200 mA)	2
P	236	–	–	–	–	–	–	2
P	237	55	E	F (200 mA)	80	G	G (200 mA)	2
P	238	–	–	–	–	–	–	2
P	239	–	–	–	–	–	–	2
P	240	56	E	F (200 mA)	81	G	G (200 mA)	2
Q	241	46	E	E (100 mA)	66	G	E (100 mA)	2
Q	242	–	–	–	–	–	–	2
Q	243	47	E	E (100 mA)	67	G	E (100 mA)	2
Q	244	–	–	–	–	–	–	2
Q	245	48	E	E (100 mA)	68	G	E (100 mA)	2
Q	246	49	E	E (100 mA)	69	G	E (100 mA)	2
Q	247	–	–	–	–	–	–	2
Q	248	–	–	–	–	–	–	2
Q	249	–	–	–	70	G	E (100 mA)	2
Q	250	–	–	–	–	–	–	2
Q	251	–	–	–	–	–	–	2
Q	252	–	–	–	–	–	–	2
Q	253	–	–	–	71	G	E (100 mA)	2
Q	254	–	–	–	–	–	–	2
Q	255	–	–	–	–	–	–	2
Q	256	50	E	E (100 mA)	72	G	E (100 mA)	2

Lab	MC	169-Pin Ultra FineLine BGA	256-Pin FineLine BGA	IOGND Group for 169-Pin Ultra FineLine BGA & 256-Pin FineLine BGA (200 mA)	IOVCC Group for 169-Pin Ultra FineLine BGA & 256-Pin FineLine BGA	208-Pin PQFP (4)	IOGND Group for 208-Pin PQFP (200 mA)	IOVCC Group for 208-Pin PQFP	I/O Bank
A	1	–	C3	B	D (200 mA)	153	B	B (200 mA)	1
A	2	–	–	–	–	–	–	–	1
A	3	B1	C4	B	D (200 mA)	154	B	B (200 mA)	1
A	4	–	–	–	–	–	–	–	1
A	5	A1	E5	B	D (200 mA)	159	B	B (200 mA)	1
A	6	B2	D5	B	C (200 mA)	160	B	B (200 mA)	1
A	7	–	–	–	–	–	–	–	1
A	8	C3	C5	B	B (200 mA)	161	B	B (200 mA)	1
A	9	–	B4	B	B (200 mA)	162	B	B (200 mA)	1
A	10	–	–	–	–	–	–	–	1
A	11	B3	A4	B	B (200 mA)	163	B	B (200 mA)	1
A	12	–	–	–	–	–	–	–	1
A	13	C4	A5	B	B (200 mA)	164	B	B (200 mA)	1
A	14	B4	D6	B	A (100 mA)	166	B	A (100 mA)	1
A	15	–	–	–	–	–	–	–	1
A	16	A4	C6	B	A (100 mA)	167	B	A (100 mA)	1
B	17	E3	F5	C	E (200 mA)	141	C	C (200 mA)	1
B	18	–	–	–	–	–	–	–	1
B	19	E2	F2	C	E (200 mA)	142	C	C (200 mA)	1
B	20	–	–	–	–	–	–	–	1
B	21	D4	E1	C	D (200 mA)	144	C	B (200 mA)	1
B	22	D3	F4	C	D (200 mA)	145	C	B (200 mA)	1
B	23	–	–	–	–	–	–	–	1
B	24	D2	F3	C	D (200 mA)	146	C	B (200 mA)	1
B	25	D1	E2	C	D (200 mA)	147	C	B (200 mA)	1
B	26	–	–	–	–	–	–	–	1
B	27	C2	D2	C	D (200 mA)	148	C	B (200 mA)	1
B	28	–	–	–	–	–	–	–	1
B	29	C1	E3	C	D (200 mA)	149	C	B (200 mA)	1
B	30	–	E4	C	D (200 mA)	150	C	B (200 mA)	1
B	31	–	–	–	–	–	–	–	1
B	32	E4	D4 (1)	C	D (200 mA)	151	C	B (200 mA)	1
C	33	M1	N4	G	G (200 mA)	108	E	D (200 mA)	1
C	34	–	–	–	–	–	–	–	1
C	35	L1	P3	G	G (200 mA)	109	E	D (200 mA)	1
C	36	–	–	–	–	–	–	–	1
C	37	L2	N3	G	G (200 mA)	110	E	D (200 mA)	1
C	38	–	M4	G	G (200 mA)	111	E	D (200 mA)	1
C	39	–	–	–	–	–	–	–	1
C	40	K2	M2	F	G (200 mA)	112	E	D (200 mA)	1
C	41	K3	L4	F	G (200 mA)	113	E	D (200 mA)	1
C	42	–	–	–	–	–	–	–	1
C	43	K4	L5	F	G (200 mA)	114	E	D (200 mA)	1

Lab	MC	169-Pin Ultra FineLine BGA	256-Pin FineLine BGA	IOGND Group for 169-Pin Ultra FineLine BGA & 256-Pin FineLine BGA (200 mA)	IOVCC Group for 169-Pin Ultra FineLine BGA & 256-Pin FineLine BGA	208-Pin PQFP (4)	IOGND Group for 208-Pin PQFP (200 mA)	IOVCC Group for 208-Pin PQFP	I/O Bank
C	44	–	–	–	–	–	–	–	1
C	45	K1	K6	F	G (200 mA)	115	E	D (200 mA)	1
C	46	–	K5	E	G (200 mA)	117	D	D (200 mA)	1
C	47	–	–	–	–	–	–	–	1
C	48	J5	K4	E	G (200 mA)	118	D	D (200 mA)	1
D	49	M5	N6	H	H (200 mA)	92	F	E (200 mA)	1
D	50	–	–	–	–	–	–	–	1
D	51	N5	T5	H	H (200 mA)	93	F	E (200 mA)	1
D	52	–	–	–	–	–	–	–	1
D	53	L4	M6	G	H (200 mA)	95	E	E (200 mA)	1
D	54	M4	R5	G	H (200 mA)	96	E	E (200 mA)	1
D	55	–	–	–	–	–	–	–	1
D	56	N4	M5	G	H (200 mA)	97	E	E (200 mA)	1
D	57	L3	P5	G	H (200 mA)	98	E	E (200 mA)	1
D	58	–	–	–	–	–	–	–	1
D	59	M3	N5	G	H (200 mA)	99	E	E (200 mA)	1
D	60	–	–	–	–	–	–	–	1
D	61	M2	T4	G	H (200 mA)	100	E	E (200 mA)	1
D	62	–	R4	G	H (200 mA)	101	E	E (200 mA)	1
D	63	–	–	–	–	–	–	–	1
D	64	N1	P4	G	H (200 mA)	102	E	E (200 mA)	1
E	65	D5	B6	B	A (100 mA)	168	B	A (100 mA)	1
E	66	–	–	–	–	–	–	–	1
E	67	C5	E6	B	A (100 mA)	169	B	A (100 mA)	1
E	68	–	–	–	–	–	–	–	1
E	69	B5	F7	B	A (100 mA)	170	B	A (100 mA)	1
E	70	–	E7	B	A (100 mA)	171	B	A (100 mA)	1
E	71	–	–	–	–	–	–	–	1
E	72	A5	D7	B	A (100 mA)	172	B	A (100 mA)	1
E	73	F6	C7	B	A (100 mA)	173	B	A (100 mA)	1
E	74	–	–	–	–	–	–	–	1
E	75	C6	B7	A	A (100 mA)	175	A	A (100 mA)	1
E	76	–	–	–	–	–	–	–	1
E	77	B6	A7	A	A (100 mA)	176 (1)	A	A (100 mA)	1
E	78	A6	F8	A	A (100 mA)	177	A	A (100 mA)	1
E	79	–	–	–	–	–	–	–	1
E	80	C7	B8	A	A (100 mA)	178	A	A (100 mA)	1
F	81	G5	H5	E	E (200 mA)	130	D	C (200 mA)	1
F	82	–	–	–	–	–	–	–	1
F	83	G3	H1	E	E (200 mA)	131	D	C (200 mA)	1
F	84	–	–	–	–	–	–	–	1
F	85	G2	H2	E	E (200 mA)	132	D	C (200 mA)	1
F	86	G1	H3	E	E (200 mA)	133	D	C (200 mA)	1

Lab	MC	169-Pin Ultra FineLine BGA	256-Pin FineLine BGA	IOGND Group for 169-Pin Ultra FineLine BGA & 256-Pin FineLine BGA (200 mA)	IOVCC Group for 169-Pin Ultra FineLine BGA & 256-Pin FineLine BGA	208-Pin PQFP (4)	IOGND Group for 208-Pin PQFP (200 mA)	IOVCC Group for 208-Pin PQFP	I/O Bank
F	87	–	–	–	–	–	–	–	1
F	88	F4	H4	D	E (200 mA)	135	C	C (200 mA)	1
F	89	F3	G6	D	E (200 mA)	136	C	C (200 mA)	1
F	90	–	–	–	–	–	–	–	1
F	91	G4	G5	D	E (200 mA)	137	C	C (200 mA)	1
F	92	–	–	–	–	–	–	–	1
F	93	F2	G2	C	E (200 mA)	138	C	C (200 mA)	1
F	94	–	G4	C	E (200 mA)	139	C	C (200 mA)	1
F	95	–	–	–	–	–	–	–	1
F	96	E5	F1	C	E (200 mA)	140	C	C (200 mA)	1
G	97	J3	K3	E	G (200 mA)	119	D	D (200 mA)	1
G	98	–	–	–	–	–	–	–	1
G	99	J2	K2	E	G (200 mA)	120	D	D (200 mA)	1
G	100	–	–	–	–	–	–	–	1
G	101	H4	J7	E	G (200 mA)	121	D	D (200 mA)	1
G	102	–	H7	E	G (200 mA)	122	D	D (200 mA)	1
G	103	–	–	–	–	–	–	–	1
G	104	H3	J5	E	G (200 mA)	123	D	D (200 mA)	1
G	105	H2	J2	E	F (200 mA)	124	D	D (200 mA)	1
G	106	–	–	–	–	–	–	–	1
G	107	G7	J3	E	E (200 mA)	126	D	C (200 mA)	1
G	108	–	–	–	–	–	–	–	1
G	109	G6	J4 (2)	E	E (200 mA)	127 (1)	D	C (200 mA)	1
G	110	–	H6	E	E (200 mA)	128 (2)	D	C (200 mA)	1
G	111	–	–	–	–	–	–	–	1
G	112	J4	J6 (1)	E	E (200 mA)	129	D	C (200 mA)	1
H	113	–	M8	H	I (58 mA)	79	F	F (58 mA)	1
H	114	–	–	–	–	–	–	–	1
H	115	H6	N8	H	I (58 mA)	80	F	F (58 mA)	1
H	116	–	–	–	–	–	–	–	1
H	117	J6	L8	H	I (58 mA)	81	F	F (58 mA)	1
H	118	K6	R7	H	I (58 mA)	84	F	F (58 mA)	1
H	119	–	–	–	–	–	–	–	1
H	120	L6	P7	H	H (200 mA)	86	F	E (200 mA)	1
H	121	M6	N7	H	H (200 mA)	87	F	E (200 mA)	1
H	122	–	–	–	–	–	–	–	1
H	123	N6	M7	H	H (200 mA)	88	F	E (200 mA)	1
H	124	–	–	–	–	–	–	–	1
H	125	K5	L7	H	H (200 mA)	89	F	E (200 mA)	1
H	126	–	T6	H	H (200 mA)	90	F	E (200 mA)	1
H	127	–	–	–	–	–	–	–	1
H	128	L5	R6	H	H (200 mA)	91	F	E (200 mA)	1
I	129	D9	C11	A	Q (200 mA)	197	A	K (200 mA)	2

Lab	MC	169-Pin Ultra FineLine BGA	256-Pin FineLine BGA	IOGND Group for 169-Pin Ultra FineLine BGA & 256-Pin FineLine BGA (200 mA)	IOVCC Group for 169-Pin Ultra FineLine BGA & 256-Pin FineLine BGA	208-Pin PQFP (4)	IOGND Group for 208-Pin PQFP (200 mA)	IOVCC Group for 208-Pin PQFP	I/O Bank
I	130	–	–	–	–	–	–	–	2
I	131	C9	B11	A	R (200 mA)	196	A	K (200 mA)	2
I	132	–	–	–	–	–	–	–	2
I	133	B9	A11	A	R (200 mA)	195	A	K (200 mA)	2
I	134	–	F10	A	R (200 mA)	194	A	K (200 mA)	2
I	135	–	–	–	–	–	–	–	2
I	136	A9	E10	A	R (200 mA)	193	A	K (200 mA)	2
I	137	F8	A10	A	R (200 mA)	192	A	K (200 mA)	2
I	138	–	–	–	–	–	–	–	2
I	139	C8	C10	A	S(100 mA)	190	A	L (100 mA)	2
I	140	–	–	–	–	–	–	–	2
I	141	B8	D10	A	S (100 mA)	189 (1)	A	L (100 mA)	2
I	142	A8	F9	A	S (100 mA)	188	A	L (100 mA)	2
I	143	–	–	–	–	–	–	–	2
I	144	F7	A9	A	S (100 mA)	187	A	L (100 mA)	2
J	145	H12	J15	N	N (200 mA)	27	I	I (200 mA)	2
J	146	–	–	–	–	–	–	–	2
J	147	G11	J16	N	N (200 mA)	26	I	I (200 mA)	2
J	148	–	–	–	–	–	–	–	2
J	149	G12	J10	N	N (200 mA)	25	I	I (200 mA)	2
J	150	G13	H14	N	N (200 mA)	24	I	I (200 mA)	2
J	151	–	–	–	–	–	–	–	2
J	152	G9	H13	N	O (200 mA)	22 (2)	I	J (200 mA)	2
J	153	G8	H12	N	O (200 mA)	21	I	J (200 mA)	2
J	154	–	–	–	–	–	–	–	2
J	155	F12	H11 (2)	N	O (200 mA)	20	I	J (200 mA)	2
J	156	–	–	–	–	–	–	–	2
J	157	F11	H10	N	P (200 mA)	19	I	J (200 mA)	2
J	158	–	G11	N	P (200 mA)	18	I	J (200 mA)	2
J	159	–	–	–	–	–	–	–	2
J	160	E12	G14	N	P (200 mA)	17	I	J (200 mA)	2
K	161	K13	K11	L	N (200 mA)	38	H	I (200 mA)	2
K	162	–	–	–	–	–	–	–	2
K	163	J9	K12	L	N (200 mA)	37	H	I (200 mA)	2
K	164	–	–	–	–	–	–	–	2
K	165	G10	K14	L	N (200 mA)	36	H	I (200 mA)	2
K	166	–	K13	L	N (200 mA)	35	H	I (200 mA)	2
K	167	–	–	–	–	–	–	–	2
K	168	J11	K15	L	N (200 mA)	34	H	I (200 mA)	2
K	169	J12	K16	M	N (200 mA)	33	H	I (200 mA)	2
K	170	–	–	–	–	–	–	–	2
K	171	H10	J13	N	N (200 mA)	31	I	I (200 mA)	2
K	172	–	–	–	–	–	–	–	2

Lab	MC	169-Pin Ultra FineLine BGA	256-Pin FineLine BGA	IOGND Group for 169-Pin Ultra FineLine BGA & 256-Pin FineLine BGA (200 mA)	IOVCC Group for 169-Pin Ultra FineLine BGA & 256-Pin FineLine BGA	208-Pin PQFP (4)	IOGND Group for 208-Pin PQFP (200 mA)	IOVCC Group for 208-Pin PQFP	I/O Bank
K	173	H11	J14	N	N (200 mA)	30 (1)	I	I (200 mA)	2
K	174	–	J12	N	N (200 mA)	29	I	I (200 mA)	2
K	175	–	–	–	–	–	–	–	2
K	176	J10	J11 (1)	N	N (200 mA)	28	I	I (200 mA)	2
L	177	–	R8	H	I (58 mA)	78	F	F (58 mA)	1
L	178	–	–	–	–	–	–	–	1
L	179	K7	T9	H	I (58 mA)	77	F	F (58 mA)	1
L	180	–	–	–	–	–	–	–	1
L	181	L7	R9	H	I (58 mA)	76	F	F (58 mA)	1
L	182	H8	N9	H	J (100 mA)	73	F	G (100 mA)	2
L	183	–	–	–	–	–	–	–	2
L	184	J8	M9	I	J (100 mA)	71	G	G (100 mA)	2
L	185	K8	L9	I	J (100 mA)	70	G	G (100 mA)	2
L	186	–	–	–	–	–	–	–	2
L	187	L8	R10	I	J (100 mA)	69	G	G (100 mA)	2
L	188	–	–	–	–	–	–	–	2
L	189	M8	N10	J	J (100 mA)	68	G	G (100 mA)	2
L	190	N8	M10	K	J (100 mA)	67	G	G (100 mA)	2
L	191	–	–	–	–	–	–	–	2
L	192	K9	L10	K	J (100 mA)	66	G	G (100 mA)	2
M	193	C13	B14	P	Q (200 mA)	4	J	K (200 mA)	2
M	194	–	–	–	–	–	–	–	2
M	195	B13	C13	P	Q (200 mA)	3	J	K (200 mA)	2
M	196	–	–	–	–	–	–	–	2
M	197	A13	B13	P	Q (200 mA)	206	J	K (200 mA)	2
M	198	–	F12	P	Q (200 mA)	205	J	K (200 mA)	2
M	199	–	–	–	–	–	–	–	2
M	200	B12	E12	P	Q (200 mA)	204	J	K (200 mA)	2
M	201	C11	D12	P	Q (200 mA)	203	J	K (200 mA)	2
M	202	–	–	–	–	–	–	–	2
M	203	B11	C12	P	Q (200 mA)	202	J	K (200 mA)	2
M	204	–	–	–	–	–	–	–	2
M	205	C10	B12	P	Q (200 mA)	201	J	K (200 mA)	2
M	206	B10	E11	A	Q (200 mA)	199	A	K (200 mA)	2
M	207	–	–	–	–	–	–	–	2
M	208	A10	D11	A	Q (200 mA)	198	A	K (200 mA)	2
N	209	E11	G13	N	P (200 mA)	16	I	J (200 mA)	2
N	210	–	–	–	–	–	–	–	2
N	211	F10	G12	N	P (200 mA)	15	I	J (200 mA)	2
N	212	–	–	–	–	–	–	–	2
N	213	E9	F16	O	P (200 mA)	13	J	J (200 mA)	2
N	214	D10	F15	O	P (200 mA)	12	J	J (200 mA)	2
N	215	–	–	–	–	–	–	–	2

Lab	MC	169-Pin Ultra FineLine BGA	256-Pin FineLine BGA	IOGND Group for 169-Pin Ultra FineLine BGA & 256-Pin FineLine BGA (200 mA)	IOVCC Group for 169-Pin Ultra FineLine BGA & 256-Pin FineLine BGA	208-Pin PQFP (4)	IOGND Group for 208-Pin PQFP (200 mA)	IOVCC Group for 208-Pin PQFP	I/O Bank
N	216	D11	F13	O	P (200 mA)	11	J	J (200 mA)	2
N	217	D12	F14	O	P (200 mA)	10	J	J (200 mA)	2
N	218	–	–	–	–	–	–	–	2
N	219	D13	E16	O	P (200 mA)	9	J	J (200 mA)	2
N	220	–	–	–	–	–	–	–	2
N	221	C12	E14	O	P (200 mA)	8	J	J (200 mA)	2
N	222	–	E13	O	P (200 mA)	7	J	J (200 mA)	2
N	223	–	–	–	–	–	–	–	2
N	224	E10	D13 (1)	O	P (200 mA)	6	J	J (200 mA)	2
P	225	N13	R13	L	L (200 mA)	49	H	H (200 mA)	2
P	226	–	–	–	–	–	–	–	2
P	227	M12	P13	L	L (200 mA)	48	H	H (200 mA)	2
P	228	–	–	–	–	–	–	–	2
P	229	M13	N13	L	L (200 mA)	47	H	H (200 mA)	2
P	230	–	M14	L	M (200 mA)	46	H	H (200 mA)	2
P	231	–	–	–	–	–	–	–	2
P	232	L12	M13	L	M (200 mA)	45	H	H (200 mA)	2
P	233	L13	L13	L	M (200 mA)	44	H	H (200 mA)	2
P	234	–	–	–	–	–	–	–	2
P	235	K10	L14	L	M (200 mA)	43	H	H (200 mA)	2
P	236	–	–	–	–	–	–	–	2
P	237	K11	L12	L	M (200 mA)	42	H	H (200 mA)	2
P	238	–	L15	L	N (200 mA)	40	H	I (200 mA)	2
P	239	–	–	–	–	–	–	–	2
P	240	K12	L16	L	N (200 mA)	39	H	I (200 mA)	2
Q	241	L9	R11	K	J (100 mA)	65	G	G (100 mA)	2
Q	242	–	–	–	–	–	–	–	2
Q	243	M9	P11	K	J (100 mA)	64	G	G (100 mA)	2
Q	244	–	–	–	–	–	–	–	2
Q	245	N9	N11	K	K (200 mA)	62	G	H (200 mA)	2
Q	246	L10	M11	K	K (200 mA)	61	G	H (200 mA)	2
Q	247	–	–	–	–	–	–	–	2
Q	248	–	T12	K	K (200 mA)	60	G	H (200 mA)	2
Q	249	M10	R12	K	K (200 mA)	59	G	H (200 mA)	2
Q	250	–	–	–	–	–	–	–	2
Q	251	N10	M12	K	K (200 mA)	58	G	H (200 mA)	2
Q	252	–	–	–	–	–	–	–	2
Q	253	L11	P12	K	K (200 mA)	57	G	H (200 mA)	2
Q	254	–	N12	K	K (200 mA)	56	G	H (200 mA)	2
Q	255	–	–	–	–	–	–	–	2
Q	256	M11	T13	K	K (200 mA)	55	G	H (200 mA)	2

Notes:

(1) Vertical migration in the 208-pin package within MAX 7000B devices is supported without any special considerations. However, vertical migration in this package from other MAX 7000 devices to MAX 7000B devices requires one additional pin-out consideration. Pins 51, 105, 158, and 207 are No-Connect pins in the EPM7256A, EPM7256AE, and EPM7256S devices. However, these pins are either VCCIO or GNDIO pins for the EPM7256B, EPM7512B, and EPM7512AE devices. On devices with 512 macrocells, these four pins must be connected as shown. On devices with 256 macrocells, users can select from either of two options to simplify their vertical migration to the EPM7256B device. The first option is to leave these four pins on the EPM7256B device unconnected. The second option is to connect these four pins on the EPM7256A, EPM7256AE, and EPM7256S devices to the VCCIO/GNDIO pins as indicated for the EPM7256B device.

(2) This pin may function as either a JTAG port or a user I/O pin. If the device is configured to use the JTAG ports for in-system programming, this pin is not available as a user I/O pin.

(3) This pin may function as either a VREF pin or a user I/O pin. If this pin is programmed to be a VREF pin for using the advanced I/O standards, this pin is not available as a user I/O pin.

(4) The user I/O pin count includes dedicated input pins and all I/O pins.