

SPEL Semiconductor Limited Packages Portfolio

Glossary:

μUDFN	Micro Thin Dual (0.40 mm)
UDFN	Ultra-Thin Dual (0.50 mm)
QFN	Quad (0.90 mm)
DFN	Dual (0.90 mm)
TQFN	Thin Quad (0.75 mm)
TDFN	Thin Dual (0.75 mm)
Spot	Spot Ag Plating
Ring	Ring Ag Plating
PPF	Pre-plated Frame

QFN / DFN Packages:

S.No	Package	Pkg Size (mm)	DAP Size (mm)	Lead Pitch (mm)	Lead Finish		
					Ag-Spot	Ag-Ring	NiPdAu
1	2 TDFN	3.40x2.20	1.60x1.60	NA		✓	
2	6 UDFN	1.00x1.25	0.80x0.36	0.40			✓
3	6 TDFN	2.50x2.50	1.60x2.30	0.65		✓	
4	8 UDFN	1.35x1.70	0.61x1.40	0.40		✓	
5	8 UDFN	1.35x1.70	0.55x1.40	0.40		✓	
6	8 UDFN	2.50x2.80	1.40x2.60	0.50			✓
7	8 TDFN	1.35x1.70	0.55x1.40	0.40		✓	
8	8 TDFN	1.40x1.60	0.30x1.10	0.40		✓	
9	8 TDFN	2.00x2.00	1.80x1.10	0.50	✓		
10	8 TDFN	3.00x3.00	1.80x2.40	0.65	✓		
11	8 TDFN	4.50x3.50	3.40x2.54	0.50			✓
12	10 UDFN	1.00x2.50	0.70x0.55	0.50	✓		
13	10 UDFN	1.00x2.50	0.55x0.70	0.50			✓
14	10 UDFN	1.00x2.70	0.70x0.60	0.50	✓		
15	10 TDFN	3.00x3.00	1.80x2.50	0.50	✓		
16	10 DFN	3.00x3.00	1.90x2.70	0.50			✓
17	12 UDFN	1.20x2.50	0.50x2.20	0.40		✓	
18	12 UDFN	1.35x2.50	0.65x2.20	0.40		✓	

19	12 TDFN	1.35x2.50	0.55x2.20	0.40		✓	
20	12 TDFN	2.00x6.00	1.40x5.10	0.65		✓	
21	12 TDFN	3.00x1.35	0.55x2.70	0.50		✓	
22	12 TDFN	3.00x4.00	1.90x3.50	0.50		✓	
23	12 TDFN	2.00x6.00	1.40x5.10	0.65		✓	
24	12 TQFN	2.00x2.00	1.10x1.10	0.40	✓		
25	12 DFN	1.35x3.00	0.55x2.70	0.50		✓	
26	13 DFN	5.50x4.60	3.70x3.70	0.50		✓	
27	14 TDFN	2.00x3.00	1.00x2.70	0.40		✓	
28	16 UDFN	1.35x3.30	0.65x3.00	0.40		✓	
29	16 TDFN	1.70x4.00	0.80x3.70	0.50	✓		
30	16 TDFN	3.30x1.35	0.55x3.00	0.40		✓	
31	16 TDFN	3.50x3.40	2.50x3.10	0.40		✓	
32	16 TDFN	4.00x1.60	0.70x3.70	0.50		✓	
33	16 TDFN	4.00x6.00	2.20x5.50	0.75		✓	
34	16 TDFN	5.00x5.00	3.80x4.50	0.50		✓	
35	16 TQFN	3.00x3.00	1.90x1.90	0.50		✓	✓
36	16 TQFN	3.00x3.00	2.10x2.10	0.50		✓	✓
37	16 QFN	4.00x4.00	2.50x2.50	0.65		✓	
38	16 QFN	4.00x4.00	2.80x2.80	0.65	✓		✓
39	16 QFN	4.00x4.00	2.40x2.40	0.65	✓		✓
40	20 QFN	4.00x4.00	2.80x2.80	0.50			✓
41	20 QFN	4.00x4.00	3.00x3.00	0.50	✓		
42	20 QFN	5.00x5.00	3.80x3.80	0.65		✓	✓
43	20 QFN	5.00x5.00	3.90x3.90	0.65		✓	
44	22 QFN	5.00x6.00	3.70x4.70	0.65			✓
45	23 TQFN	7.00x7.00	4.94x3.94	0.50		✓	
46	24 TQFN	4.00x4.00	2.80x2.80	0.50			✓
47	24 TQFN	4.00x4.00	3.20x2.70	0.50			✓
48	24 TQFN	6.00x6.00	4.20x4.20	0.80			✓
49	24 TQFN	6.00x6.00	4.80x4.80	0.80			✓

50	24 QFN	4.00x4.00	2.80x2.30	0.50		✓	
51	24 QFN	4.00x4.00	2.40x2.40	0.50		✓	
52	24 QFN	4.00x5.00	2.80x3.80	0.50			✓
53	24 QFN	5.00x5.00	3.80x3.80	0.65			✓
54	28 QFN	4.00x4.00	2.60x2.60	0.45		✓	
55	28 TQFN	4.00x4.00	2.80x2.80	0.50		✓	
56	28 QFN	4.00x5.00	3.00x4.00	0.50			✓
57	28 QFN	5.00x5.00	3.60x3.60	0.50		✓	✓
58	28 QFN	6.00x6.00	4.80x4.80	0.65	✓		
59	32 TQFN	3.00x6.00	2.10x5.10	0.40			✓
60	32 TQFN	5.00x5.00	3.50x3.50	0.50			✓
61	32 TQFN	5.00x5.00	4.00x4.00	0.50	✓		
62	32 TQFN	5.00x5.00	3.90x3.90	0.50	✓	✓	
63	32 TQFN	5.00x5.00	3.80x3.80	0.50			✓
64	32 QFN	7.00x7.00	5.80x5.80	0.65			✓
65	38 QFN	5.00x7.00	3.40x5.40	0.50			✓
66	40 QFN	5.00x5.00	3.70x3.70	0.40	✓		
67	40 QFN	6.00x6.00	3.75x3.75	0.50	✓		
68	40 QFN	6.00x6.00	4.80x4.80	0.50		✓	
69	44 TQFN	7.00x7.00	5.80x5.80	0.50		✓	
70	44 QFN	5.00x9.00	3.60x7.60	0.50			✓
71	44 QFN	8.00x8.00	6.80x6.80	0.65			✓
72	48 QFN	6.00x6.00	4.80x4.80	0.40	✓		
73	48 QFN	5.00x7.00	3.69x5.87	0.40		✓	
74	48 TQFN	7.00x7.00	3.80x3.80	0.50	✓		
75	48 TQFN	7.00x7.00	5.80x5.80	0.50	✓		✓
76	52 TQFN	8.00x8.00	6.40x6.40	0.50		✓	
77	56 TQFN	5.00x11.00	2.70x8.70	0.50			✓
78	56 TQFN	8.00x8.00	4.60x5.30	0.50		✓	
79	64 TQFN	7.50x7.50	4.00x4.00	0.40	✓		
80	64 TQFN	9.00x9.00	7.00x7.00	0.50	✓	✓	
81	64 TQFN	9.00x9.00	7.60x7.60	0.50	✓		

82	64 QFN	9.00x9.00	3.75x3.75	0.50	✓		
83	64 QFN	9.00x9.00	5.80x5.80	0.50		✓	
84	68 QFN	10.00x10.00	8.30x8.30	0.50			✓
85	68 TQFN	8.00x8.00	5.50x5.50	0.40		✓	
86	68 TQFN	11.00x11.00	8.60x8.60	0.50	✓		
87	68 TQFN	8.00x8.00	6.80x6.80	0.40		✓	
88	72 TQFN	5.00x11.00	3.80x9.80	0.40			✓
89	72 QFN	10.00x10.00	6.20x6.20	0.50		✓	
90	80 TQFN	12.00x12.00	9.70x9.70	0.50		✓	
91	100 QFN	12.00x12.00	10.50x10.50	0.40	✓		

Leaded Packages:

S.No	Package	Pkg Size (mm)	DAP Size (mm)	Lead Pitch (mm)	Lead Finish		
					Ag-Spot	Ag-Ring	NiPdAu
1	8 SOIC	150	95x130	50	✓		✓
2	14 SOIC	150	90X150	50			✓
3	14 SOIC	150	90X110	50	✓		
4	16 SOIC	300	160X200	50	✓		✓
5	16 SOIC	150	90x150	50			✓
6	16 SOIC	150	90x110	50	✓		
7	20 SOIC	300	126x157	50	✓		
8	20 SOIC	300	165x204	50	✓		
9	8 TSSOP	173	87x118	25	✓		
10	8 TSSOP	173	87x126	25	✓		
11	20 TSSOP	173	90x110	25	✓		
12	20 TSSOP	173	118x165	25	✓	✓	✓
13	24 TSSOP	173	118x165	25	✓		
14	24 TSSOP	173	118x217	25	✓		
15	38 TSSOP	173	118x198	25			✓
16	56 SSOP	300	160x200	25	✓		
17	40 VSOP	150	96x130/2	20	✓		
18	40 VSOP	150	65x160/1	20	✓		
19	48 VSOP	150	96x180/1	16	✓		
20	48 VSOP	150	96x130/2	16	✓		
21	80 VSOP	150	96x130/4	20		✓	
22	80 VSOP	150	90x200/2	20	✓		
23	16 QSOP	150	96x130	25	✓		✓
24	16 QSOP	150	93x92	25	✓		✓
25	20 QSOP	150	96x140	25	✓		

26	20 QSOP	150	110x160	25	✓		
27	24 QSOP	150	96x140	25	✓		
28	24 QSOP	150	110x160	25	✓		
29	28 QSOP	150	96x200	25			✓
30	8 PDIP	300	110x140	100	✓		✓
31	14 PDIP	300	110x140	100	✓		
32	16 PDIP	300	165x320	100		✓	
33	8 SIP	225	95x95	100			✓

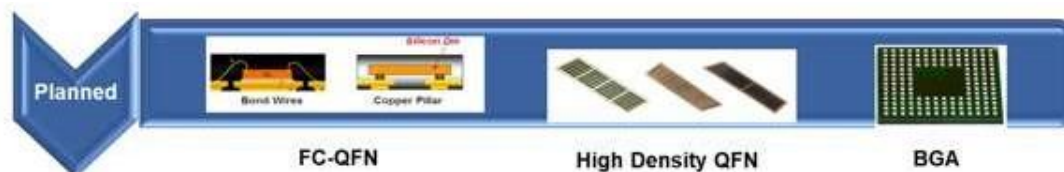
Glossary:

COL	Chip On Lead
WF	Wettable Flank

QFN/DFN (Special/Customized Packages) Package List:

Synod	Package	Pkg Size (mm)	DAP Size (mm)	Lead Pitch (mm)	Lead Finish		
					Ag-Spot	Ag-Ring	NipdAu
1	3 UDFN	1.00x0.60	0.35x0.50	0.35			✓
2	4 UDFN	1.00x1.00	0.54x0.54	0.65			✓
3	4 TDFN	1.20x1.00	COL	0.50			✓
4	4 DFN	2.00x2.50	COL	1.65			✓
5	4 DFN	2.50x3.20	COL	1.65			✓
6	6 UDFN	1.40x1.20	COL	0.40			✓
7	6 TDFN	1.40x1.20	COL	0.40			✓
8	6 DFN	3.20x5.00	COL	1.27			✓
9	8 TDFN	2.00x2.00	COL	0.50		✓	
10	10 TDFN	1.40x2.00	COL	0.40			✓
11	14 TDFN	2.50x3.00	COL	0.40			✓
12	21 TQFN	7.00x7.00	4.94x4.80	0.52		✓	
13	23 TQFN	8.00x8.00	Multi Pad	0.50		✓	
14	32 TQFN (WF)	5.00x5.00	3.9x03.90	0.50	✓		
15	52 QFN (WF)	8.00x8.00	6.4x6.4	0.50		✓	
16	64 QFN	9.00x9.00	Multi Pad	0.40		✓	

Future Packages Roadmap:



Leaded (Special/Customized Packages) Package List:

S.N o	Package	Pkg Size (Mils)	DAP Size (Mils)	Lead Pitch (Mils)	Special Characteristic (Size in Mils)
1	7 SOIC	150	95x130	50	Customized Lead
2	8 SOIC	150	95x130	50	Exposed Pad
3	20 SOIC	300	205x290	50	Exposed Pad
4	8 SOIC	150	Multi Pad	50	60x36 (8X)
5	16 SOIC	150	Split Pad	50	40x210
6	16 SOIC	150	Multi Pad	50	89x89 (Dual)
7	16 SOIC	150	Multi Pad	50	70x224 (Dual)
8	16 SOIC (Wide)	300	Multi Pad	50	200x145/200x45
9	16 SOIC (Wide)	300	Multi Pad	50	240x147/200x43
10	16 SOIC (Wide)	300	Multi Pad	50	200x93/187x44
11	16 SOIC (Wide)	300	Split Pad	50	163x60
12	16 QSOP	150	Split Pad	25	178x47
13	16 QSOP	150	Multi Pad	25	178/78x104.9,92x43