

Based Material Line Up



S7040G/S7040GB

1. CORE (C-STAGE)

Thickness		ply-up	RC (%)	Dk				Df			
mm	mil			1 GHz	3 GHz	5 GHz	10 GHz	1 GHz	3 GHz	5 GHz	10 GHz
0.051	2.00	1x106	72	3.36	3.35	3.34	3.34	0.0081	0.0086	0.0091	0.0096
0.051	2.00	1x1067	65	3.52	3.51	3.50	3.50	0.0078	0.0083	0.0088	0.0093
0.064	2.50	1x106	77	3.25	3.24	3.23	3.23	0.0084	0.0089	0.0094	0.0099
0.064	2.50	1x1067	71	3.38	3.37	3.36	3.36	0.0081	0.0086	0.0091	0.0096
0.076	3.00	1x1078	64	3.54	3.53	3.52	3.52	0.0078	0.0083	0.0088	0.0093
0.076	3.00	1x1080	64	3.54	3.53	3.52	3.52	0.0078	0.0083	0.0088	0.0093
0.076	3.00	1x1086	62	3.59	3.58	3.57	3.57	0.0077	0.0082	0.0087	0.0092
0.089	3.50	2x1067	61	3.61	3.60	3.59	3.59	0.0076	0.0081	0.0086	0.0091
0.089	3.50	1x3313	51	3.83	3.82	3.81	3.81	0.0072	0.0077	0.0082	0.0087
0.102	4.00	2x106	72	3.36	3.35	3.34	3.34	0.0081	0.0086	0.0091	0.0096
0.102	4.00	2x1067	65	3.52	3.51	3.50	3.50	0.0078	0.0083	0.0088	0.0093
0.102	4.00	1x3313	56	3.72	3.71	3.70	3.70	0.0074	0.0079	0.0084	0.0089
0.102	4.00	1x2116	47	3.92	3.91	3.90	3.90	0.0070	0.0075	0.0080	0.0085
0.114	4.50	1x2116	51	3.83	3.82	3.81	3.81	0.0072	0.0077	0.0082	0.0087
0.127	5.00	2x106	77	3.25	3.24	3.23	3.23	0.0084	0.0089	0.0094	0.0099
0.127	5.00	2x1067	71	3.38	3.37	3.36	3.36	0.0081	0.0086	0.0091	0.0096
0.127	5.00	1x2116	55	3.74	3.73	3.72	3.72	0.0074	0.0079	0.0084	0.0089
0.152	6.00	2x1078	64	3.54	3.53	3.52	3.52	0.0078	0.0083	0.0088	0.0093
0.152	6.00	2x1080	64	3.54	3.53	3.52	3.52	0.0078	0.0083	0.0088	0.0093

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0.178	7.00	2x3313	51	3.83	3.82	3.81	3.81	0.0072	0.0077	0.0082	0.0087
0.203	8.00	2x3313	56	3.72	3.71	3.70	3.70	0.0074	0.0079	0.0084	0.0089
0.203	8.00	2x2116	47	3.92	3.91	3.90	3.90	0.0070	0.0075	0.0080	0.0085
0.229	9.00	3x1080	64	3.54	3.53	3.52	3.52	0.0078	0.0083	0.0088	0.0093
0.229	9.00	2x2116	51	3.83	3.82	3.81	3.81	0.0072	0.0077	0.0082	0.0087
0.254	10.00	2x2116	55	3.74	3.73	3.72	3.72	0.0074	0.0079	0.0084	0.0089
0.305	12.00	3x2116	47	3.92	3.91	3.90	3.90	0.0070	0.0075	0.0080	0.0085
0.356	14.00	4x3313	51	3.83	3.82	3.81	3.81	0.0072	0.0077	0.0082	0.0087
0.381	15.00	3x2116	55	3.74	3.73	3.72	3.72	0.0074	0.0079	0.0084	0.0089
0.406	16.00	4x2116	47	3.92	3.91	3.90	3.90	0.0070	0.0075	0.0080	0.0085
0.457	18.00	4x2116	51	3.83	3.82	3.81	3.81	0.0072	0.0077	0.0082	0.0087
0.508	20.00	4x2116	55	3.74	3.73	3.72	3.72	0.0074	0.0079	0.0084	0.0089
0.610	24.00	6x2116	47	3.92	3.91	3.90	3.90	0.0070	0.0075	0.0080	0.0085
0.635	25.00	5x2116	55	3.74	3.73	3.72	3.72	0.0074	0.0079	0.0084	0.0089
0.711	28.00	7x2116	47	3.92	3.91	3.90	3.90	0.0070	0.0075	0.0080	0.0085
0.762	30.00	6x2116	55	3.74	3.73	3.72	3.72	0.0074	0.0079	0.0084	0.0089
0.889	35.00	7x2116	55	3.74	3.73	3.72	3.72	0.0074	0.0079	0.0084	0.0089
1.016	40.00	8x2116	55	3.74	3.73	3.72	3.72	0.0074	0.0079	0.0084	0.0089
1.219	48.00	12x2116	47	3.92	3.91	3.90	3.90	0.0070	0.0075	0.0080	0.0085
1.321	52.00	13x2116	47	3.92	3.91	3.90	3.90	0.0070	0.0075	0.0080	0.0085
1.422	56.00	14x2116	47	3.92	3.91	3.90	3.90	0.0070	0.0075	0.0080	0.0085
1.524	60.00	15x2116	47	3.92	3.91	3.90	3.90	0.0070	0.0075	0.0080	0.0085

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2. PREPREG (B-STAGE)

Glass style	RC (%) Nominal	Thickness		Dk				Df			
		mm	mil	1GHz	3GHz	5GHz	10GHz	1 GHz	3 GHz	5 GHz	10 GHz
106	72	0.051	2.00	3.36	3.35	3.34	3.34	0.0081	0.0086	0.0091	0.0096
106	77	0.064	2.50	3.25	3.24	3.23	3.23	0.0084	0.0089	0.0094	0.0099
1067	65	0.051	2.00	3.52	3.51	3.50	3.50	0.0078	0.0083	0.0088	0.0093
1067	71	0.064	2.50	3.38	3.37	3.36	3.36	0.0081	0.0086	0.0091	0.0096
1078	62	0.071	2.80	3.59	3.58	3.57	3.57	0.0077	0.0082	0.0087	0.0092
1078	64	0.076	3.00	3.54	3.53	3.52	3.52	0.0078	0.0083	0.0088	0.0093
1078	68	0.086	3.40	3.45	3.44	3.43	3.43	0.0080	0.0085	0.0090	0.0095
1080	62	0.071	2.80	3.59	3.58	3.57	3.57	0.0077	0.0082	0.0087	0.0092
1080	64	0.076	3.00	3.54	3.53	3.52	3.52	0.0078	0.0083	0.0088	0.0093
1080	68	0.086	3.40	3.45	3.44	3.43	3.43	0.0080	0.0085	0.0090	0.0095
3313	56	0.102	4.00	3.72	3.71	3.70	3.70	0.0074	0.0079	0.0084	0.0089
3313	58	0.109	4.30	3.68	3.67	3.66	3.66	0.0075	0.0080	0.0085	0.0090
3313	60	0.117	4.60	3.63	3.62	3.61	3.61	0.0076	0.0081	0.0086	0.0091
2116	53	0.122	4.80	3.79	3.78	3.77	3.77	0.0073	0.0078	0.0083	0.0088
2116	55	0.127	5.00	3.74	3.73	3.72	3.72	0.0074	0.0079	0.0084	0.0089
2116	57	0.135	5.30	3.70	3.69	3.68	3.68	0.0075	0.0080	0.0085	0.0090
2116	59	0.145	5.70	3.65	3.64	3.63	3.63	0.0076	0.0081	0.0086	0.0091

3. REMARK

- 1) Dk/Df measuring method: IPC TM-650 2.5.5.5
- 2) Copper foil: RTF 18μm, 35μm, 70μm.
- 3) All the values listed above are for your reference only. Please contact Shengyi Technology Co., Ltd. for detailed information. All rights from this

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- 4) For laminate orders, we'll follow metric thickness accuracy of 3 decimal places for control.
- 5) Last update: Nov, 2019