

# Base Material Line Up



## Synamic 6/Synamic 6B

### 1. CORE (C-STAGE)

Thickness		ply-up	RC (%)	Dk					Df				
mm	mil			1 GHz	3 GHz	5 GHz	10 GHz	15GHz	1 GHz	3 GHz	5 GHz	10 GHz	15GHz
0.051	2.00	1*1035	64	3.32	3.32	3.32	3.32	3.31	0.0023	0.0026	0.0029	0.0032	0.0035
0.064	2.50	1*1035	71	3.14	3.14	3.14	3.14	3.13	0.0020	0.0023	0.0026	0.0029	0.0032
0.076	3.00	1*1078	63	3.35	3.35	3.35	3.35	3.34	0.0023	0.0026	0.0029	0.0032	0.0035
0.076	3.00	1*1080	63	3.35	3.35	3.35	3.35	3.34	0.0023	0.0026	0.0029	0.0032	0.0035
0.089	3.50	1*1078	68	3.21	3.21	3.21	3.21	3.20	0.0021	0.0024	0.0027	0.0030	0.0033
0.089	3.50	1*1080	68	3.21	3.21	3.21	3.21	3.20	0.0021	0.0024	0.0027	0.0030	0.0033
0.102	4.00	1*3313	56	3.56	3.56	3.56	3.56	3.55	0.0027	0.0030	0.0033	0.0036	0.0039
0.102	4.00	2*1035	64	3.32	3.32	3.32	3.32	3.31	0.0023	0.0026	0.0029	0.0032	0.0035
0.114	4.50	1*3313	59	3.45	3.45	3.45	3.45	3.44	0.0025	0.0028	0.0031	0.0034	0.0037
0.127	5.00	1*2116	54	3.58	3.58	3.58	3.58	3.57	0.0027	0.0030	0.0033	0.0036	0.0039
0.127	5.00	2*1035	71	3.14	3.14	3.14	3.14	3.13	0.0020	0.0023	0.0026	0.0029	0.0032
0.127	5.00	2*1078	58	3.48	3.48	3.48	3.48	3.47	0.0026	0.0029	0.0032	0.0035	0.0038
0.140	5.50	1*2116	58	3.48	3.48	3.48	3.48	3.47	0.0026	0.0029	0.0032	0.0035	0.0038
0.152	6.00	2*1078	63	3.35	3.35	3.35	3.35	3.34	0.0023	0.0026	0.0029	0.0032	0.0035
0.152	6.00	2*1080	63	3.35	3.35	3.35	3.35	3.34	0.0023	0.0026	0.0029	0.0032	0.0035
0.178	7.00	2*1078	68	3.21	3.21	3.21	3.21	3.20	0.0021	0.0024	0.0027	0.0030	0.0033
0.178	7.00	2*1080	68	3.21	3.21	3.21	3.21	3.20	0.0021	0.0024	0.0027	0.0030	0.0033
0.203	8.00	2*3313	55	3.56	3.56	3.56	3.56	3.55	0.0027	0.0030	0.0033	0.0036	0.0039
0.254	10.00	2*2116	54	3.58	3.58	3.58	3.58	3.57	0.0027	0.0030	0.0033	0.0036	0.0039
0.306	12.00	3*3313	55	3.56	3.56	3.56	3.56	3.55	0.0027	0.0030	0.0033	0.0036	0.0039

# Base Material Line Up



0.381	15.00	3*2116	54	3.58	3.58	3.58	3.58	3.57	0.0027	0.0030	0.0033	0.0036	0.0039
0.508	20.00	4*2116	54	3.58	3.58	3.58	3.58	3.57	0.0027	0.0030	0.0033	0.0036	0.0039
0.635	25.00	5*2116	54	3.58	3.58	3.58	3.58	3.57	0.0027	0.0030	0.0033	0.0036	0.0039
0.762	30.00	6*2116	54	3.58	3.58	3.58	3.58	3.57	0.0027	0.0030	0.0033	0.0036	0.0039
0.889	35.00	7*2116	54	3.58	3.58	3.58	3.58	3.57	0.0027	0.0030	0.0033	0.0036	0.0039
1.016	40.00	8*2116	54	3.58	3.58	3.58	3.58	3.57	0.0027	0.0030	0.0033	0.0036	0.0039

## 2. PREPREG (B-STAGE)

Glass style	RC (%) Nominal	Thickness		Dk					Df				
		mm	mil	1GHz	3GHz	5GHz	10GHz	15GHz	1 GHz	3 GHz	5 GHz	10 GHz	15GHz
1035	64	0.051	2.00	3.32	3.32	3.32	3.32	3.31	0.0023	0.0026	0.0029	0.0032	0.0035
1035	71	0.064	2.50	3.14	3.14	3.14	3.14	3.13	0.0020	0.0023	0.0026	0.0029	0.0032
1035	73	0.069	2.70	3.08	3.08	3.08	3.08	3.07	0.0020	0.0023	0.0026	0.0029	0.0032
1078	63	0.076	3.00	3.35	3.35	3.35	3.35	3.34	0.0023	0.0026	0.0029	0.0032	0.0035
1078	68	0.089	3.50	3.21	3.21	3.21	3.21	3.20	0.0021	0.0024	0.0027	0.0030	0.0033
1078	72	0.102	4.00	3.11	3.11	3.11	3.11	3.10	0.0020	0.0023	0.0026	0.0029	0.0032
1078	75	0.114	4.50	3.03	3.03	3.03	3.03	3.02	0.0020	0.0023	0.0026	0.0029	0.0032
1080	63	0.076	3.00	3.35	3.35	3.35	3.35	3.34	0.0023	0.0026	0.0029	0.0032	0.0035
1080	68	0.089	3.50	3.21	3.21	3.21	3.21	3.20	0.0021	0.0024	0.0027	0.0030	0.0033
1080	72	0.102	4.00	3.11	3.11	3.11	3.11	3.10	0.0020	0.0023	0.0026	0.0029	0.0032
3313	56	0.102	4.00	3.56	3.56	3.56	3.56	3.55	0.0027	0.0030	0.0033	0.0036	0.0039
3313	59	0.114	4.50	3.45	3.45	3.45	3.45	3.44	0.0025	0.0028	0.0031	0.0034	0.0037
2116	54	0.127	5.00	3.58	3.58	3.58	3.58	3.57	0.0027	0.0030	0.0033	0.0036	0.0039
2116	58	0.140	5.50	3.48	3.48	3.48	3.48	3.47	0.0026	0.0029	0.0032	0.0035	0.0038

# Base Material Line Up



## 3. REMARK

- 1) Dk/Df test method: IPC TM-650 2.5.5.5
- 2) Copper foil: HVLP 18, 35  $\mu$  m, RTF 18, 35,70  $\mu$  m.
- 3) For laminate orders, we will follow metric thickness accuracy of 3 decimal places for control.
- 4) Updated date: February, 2020
- 5) All the values listed above are for your reference only. Please contact Shengyi Technology Co., Ltd. for detailed information. All rights from this line up are reserved by Shengyi Technology Co., Ltd.