

# 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	67	3.42	3.42	3.42	3.42	3.41	0.0023	0.0026	0.0029	0.0032	0.0035
0.064	2.50	1*1035	73	3.24	3.24	3.24	3.24	3.23	0.0020	0.0023	0.0026	0.0029	0.0032
0.076	3.00	1*1078	65	3.45	3.45	3.45	3.45	3.44	0.0023	0.0026	0.0029	0.0032	0.0035
0.076	3.00	1*1080	65	3.45	3.45	3.45	3.45	3.44	0.0023	0.0026	0.0029	0.0032	0.0035
0.089	3.50	1*1078	70	3.31	3.31	3.31	3.31	3.30	0.0021	0.0024	0.0027	0.0030	0.0033
0.089	3.50	1*1080	70	3.31	3.31	3.31	3.31	3.30	0.0021	0.0024	0.0027	0.0030	0.0033
0.102	4.00	1*3313	57	3.66	3.66	3.66	3.66	3.65	0.0027	0.0030	0.0033	0.0036	0.0039
0.102	4.00	2*1035	67	3.42	3.42	3.42	3.42	3.41	0.0023	0.0026	0.0029	0.0032	0.0035
0.114	4.50	1*3313	61	3.55	3.55	3.55	3.55	3.54	0.0025	0.0028	0.0031	0.0034	0.0037
0.127	5.00	1*2116	56	3.68	3.68	3.68	3.68	3.67	0.0027	0.0030	0.0033	0.0036	0.0039
0.127	5.00	2*1035	73	3.24	3.24	3.24	3.24	3.23	0.0020	0.0023	0.0026	0.0029	0.0032
0.127	5.00	2*1078	60	3.58	3.58	3.58	3.58	3.57	0.0026	0.0029	0.0032	0.0035	0.0038
0.140	5.50	1*2116	60	3.58	3.58	3.58	3.58	3.57	0.0026	0.0029	0.0032	0.0035	0.0038
0.152	6.00	2*1078	65	3.45	3.45	3.45	3.45	3.44	0.0023	0.0026	0.0029	0.0032	0.0035
0.152	6.00	2*1080	65	3.45	3.45	3.45	3.45	3.44	0.0023	0.0026	0.0029	0.0032	0.0035
0.178	7.00	2*1078	70	3.31	3.31	3.31	3.31	3.30	0.0021	0.0024	0.0027	0.0030	0.0033
0.178	7.00	2*1080	70	3.31	3.31	3.31	3.31	3.30	0.0021	0.0024	0.0027	0.0030	0.0033
0.203	8.00	2*3313	57	3.66	3.66	3.66	3.66	3.65	0.0027	0.0030	0.0033	0.0036	0.0039
0.254	10.00	2*2116	56	3.68	3.68	3.68	3.68	3.67	0.0027	0.0030	0.0033	0.0036	0.0039

# Base Material Line Up



0.306	12.00	3*3313	57	3.66	3.66	3.66	3.66	3.65	0.0027	0.0030	0.0033	0.0036	0.0039
0.381	15.00	3*2116	56	3.68	3.68	3.68	3.68	3.67	0.0027	0.0030	0.0033	0.0036	0.0039
0.508	20.00	4*2116	56	3.68	3.68	3.68	3.68	3.67	0.0027	0.0030	0.0033	0.0036	0.0039
0.635	25.00	5*2116	56	3.68	3.68	3.68	3.68	3.67	0.0027	0.0030	0.0033	0.0036	0.0039
0.762	30.00	6*2116	56	3.68	3.68	3.68	3.68	3.67	0.0027	0.0030	0.0033	0.0036	0.0039
0.889	35.00	7*2116	56	3.68	3.68	3.68	3.68	3.67	0.0027	0.0030	0.0033	0.0036	0.0039
1.016	40.00	8*2116	56	3.68	3.68	3.68	3.68	3.67	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	67	0.051	2.00	3.42	3.42	3.42	3.42	3.41	0.0023	0.0026	0.0029	0.0032	0.0035
1035	73	0.064	2.50	3.24	3.24	3.24	3.24	3.23	0.0020	0.0023	0.0026	0.0029	0.0032
1035	75	0.069	2.70	3.18	3.18	3.18	3.18	3.17	0.0020	0.0023	0.0026	0.0029	0.0032
1078	65	0.076	3.00	3.45	3.45	3.45	3.45	3.44	0.0023	0.0026	0.0029	0.0032	0.0035
1078	70	0.089	3.50	3.31	3.31	3.31	3.31	3.30	0.0021	0.0024	0.0027	0.0030	0.0033
1078	73	0.102	4.00	3.21	3.21	3.21	3.21	3.20	0.0020	0.0023	0.0026	0.0029	0.0032
1078	76	0.114	4.50	3.13	3.13	3.13	3.13	3.12	0.0020	0.0023	0.0026	0.0029	0.0032
1080	65	0.076	3.00	3.45	3.45	3.45	3.45	3.44	0.0023	0.0026	0.0029	0.0032	0.0035
1080	70	0.089	3.50	3.31	3.31	3.31	3.31	3.30	0.0021	0.0024	0.0027	0.0030	0.0033
1080	73	0.102	4.00	3.21	3.21	3.21	3.21	3.20	0.0020	0.0023	0.0026	0.0029	0.0032
3313	57	0.102	4.00	3.66	3.66	3.66	3.66	3.65	0.0027	0.0030	0.0033	0.0036	0.0039
3313	61	0.114	4.50	3.55	3.55	3.55	3.55	3.54	0.0025	0.0028	0.0031	0.0034	0.0037
2116	56	0.127	5.00	3.68	3.68	3.68	3.68	3.67	0.0027	0.0030	0.0033	0.0036	0.0039
2116	60	0.140	5.50	3.58	3.58	3.58	3.58	3.57	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: HVLP2 18, 35 $\mu$ m, RTF2 18, 35,70 $\mu$ m.
- 3) For laminate orders, we will follow metric thickness accuracy of 3 decimal places for control.
- 4) Updated date: July, 2022
- 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.