

# Based Material Line Up



## Autolad2GH Core/Prepreg Line up

### 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
0.058	2.3	1X1078	57	3.97	3.95	3.95	3.94	0.016	0.015	0.014	0.014
0.076	3	1X1078	66	3.73	3.71	3.71	3.70	0.018	0.017	0.016	0.016
0.10	4	1X3313	58	3.95	3.93	3.92	3.91	0.017	0.016	0.015	0.015
0.13	5	1X2116	57	3.97	3.95	3.95	3.94	0.016	0.015	0.014	0.014
0.15	6	1X1506	46	4.32	4.30	4.30	4.29	0.013	0.012	0.012	0.012
0.18	7	1X7628	43	4.42	4.40	4.35	4.34	0.013	0.012	0.011	0.011
0.20	8	1X7628	48	4.22	4.20	4.20	4.19	0.013	0.012	0.012	0.012
0.25	10	2X2116	57	3.97	3.95	3.95	3.94	0.016	0.015	0.014	0.014
0.25	10	3X1080	69	3.67	3.66	3.67	3.66	0.018	0.017	0.017	0.017
0.30	12	2X1506	46	4.32	4.30	4.30	4.29	0.013	0.012	0.012	0.012
0.30	12	2X2116+1X1080	56	3.99	3.97	3.97	3.96	0.016	0.015	0.014	0.014
0.36	14	2X7628	43	4.42	4.40	4.35	4.34	0.013	0.012	0.011	0.011
0.38	15	2X7628	45	4.37	4.35	4.30	4.29	0.013	0.012	0.012	0.012
0.38	15	2X1506+1X1080	50	4.19	4.18	4.17	4.16	0.014	0.013	0.013	0.013
0.38	15	3X2116	57	3.97	3.95	3.95	3.94	0.016	0.015	0.014	0.014
0.40	15.7	2X7628	48	4.22	4.20	4.20	4.19	0.013	0.012	0.012	0.012
0.45	18	2X7628+1X1080	52	4.11	4.11	4.09	4.08	0.015	0.014	0.014	0.014
0.53	21	3X7628	43	4.42	4.40	4.35	4.34	0.013	0.012	0.011	0.011

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0.60	23.6	3X7628	48	4.22	4.20	4.20	4.19	0.013	0.012	0.012	0.012
0.70	28	4X7628	43	4.42	4.40	4.35	4.34	0.013	0.012	0.011	0.011
0.80	31	4X7628	48	4.22	4.20	4.20	4.19	0.013	0.012	0.012	0.012
1.00	40	5X7628	48	4.22	4.20	4.20	4.19	0.013	0.012	0.012	0.012
1.20	47	6X7628	48	4.22	4.20	4.20	4.19	0.013	0.012	0.012	0.012
1.40	55	7X7628	48	4.22	4.20	4.20	4.19	0.013	0.012	0.012	0.012
1.50	59	8X7628	45	4.37	4.35	4.30	4.29	0.013	0.012	0.012	0.012
1.60	63	8X7628	48	4.22	4.20	4.20	4.19	0.013	0.012	0.012	0.012
1.90	74	10X7628	45	4.37	4.35	4.30	4.29	0.013	0.012	0.012	0.012

## 2. Prepreg (B-Stage)

Glasstyle	RC (%) Nominal	Thickness		DK				Df			
		mm	mil	1 GHz	3 GHz	5 GHz	10 GHz	1 GHz	3 GHz	5 GHz	10 GHz
1037	73	0.048	1.90	3.56	3.54	3.55	3.54	0.018	0.017	0.017	0.017
	75	0.053	2.10	3.50	3.49	3.50	3.49	0.018	0.017	0.018	0.018
106	73	0.050	2.00	3.56	3.54	3.55	3.54	0.018	0.017	0.017	0.017
	77	0.060	2.40	3.43	3.41	3.44	3.43	0.019	0.018	0.018	0.018
1067	66	0.050	2.00	3.73	3.71	3.71	3.70	0.018	0.017	0.016	0.016
	71	0.060	2.40	3.62	3.60	3.61	3.60	0.018	0.017	0.017	0.017
	77	0.076	3.00	3.43	3.41	3.44	3.43	0.019	0.018	0.018	0.018
1080/1078	66	0.076	3.00	3.73	3.71	3.71	3.70	0.018	0.017	0.016	0.016
	69	0.085	3.40	3.67	3.66	3.67	3.66	0.018	0.017	0.017	0.017
	71	0.092	3.60	3.62	3.60	3.61	3.60	0.018	0.017	0.017	0.017
	74	0.104	4.10	3.53	3.51	3.52	3.51	0.018	0.017	0.018	0.018

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3313	58	0.102	4.00	3.95	3.93	3.92	3.91	0.017	0.016	0.015	0.015
2116	54	0.117	4.60	4.11	4.10	4.08	4.07	0.015	0.014	0.014	0.014
	57	0.127	5.00	3.97	3.95	3.95	3.94	0.016	0.015	0.014	0.014
	60	0.134	5.30	3.93	3.91	3.91	3.90	0.017	0.016	0.015	0.015
	63	0.150	6.00	3.83	3.81	3.81	3.80	0.017	0.016	0.015	0.015
7628	43	0.180	7.10	4.42	4.40	4.35	4.34	0.013	0.012	0.011	0.011
	45	0.190	7.50	4.37	4.35	4.30	4.29	0.013	0.012	0.012	0.012
	48	0.200	8.00	4.22	4.20	4.20	4.19	0.013	0.012	0.012	0.012
	50	0.210	8.30	4.19	4.18	4.17	4.16	0.014	0.013	0.013	0.013

### 3. Remark

- 1) Dk/Df measuring method: IPC TM-650 2.5.5.5;
- 2) In order to satisfy  $CTI \geq 600V$ , 2116( $RC \geq 54\%$ ), 7628( $RC \geq 45\%$ ) or above thickness prepreg is suggested to be used for outer prepreg layer.
- 3) 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.
- 4) Latest update: March 2023