

Typical Performance Data

RF (IN) (MHz)	LO (MHz)	CONVERSION LOSS IF FIXED @IF(OUT)=30MHz (dB)			RF (IN) (MHz)	LO (MHz)	IP3 INPUT (dBm)			RF (IN) (MHz)	LO (MHz)	COMPRESSION @RF IN=+1dBm (dB)						
		@LO (dBm)					@LO (dBm)					@LO (dBm)						
		+4	+7	+10			+4	+7	+10			+4	+7	+10				
5.0	35.0	5.92	5.85	5.80	10.1	40.1	14.23	14.80	16.65	10.1	40.1	1.17	0.88	0.67				
10.0	40.0	6.02	5.88	5.81	90.4	120.4	9.99	8.98	9.16	90.4	120.4	0.98	0.70	0.54				
90.4	120.4	6.90	6.65	6.48	170.6	200.6	6.73	7.81	9.94	170.6	200.6	1.04	0.72	0.59				
170.6	200.6	7.19	6.87	6.60	250.9	280.9	6.36	8.79	11.61	250.9	280.9	1.16	0.86	0.68				
250.9	280.9	7.38	6.96	6.65	331.2	361.2	6.70	9.50	13.59	331.2	361.2	1.34	1.11	0.92				
331.2	361.2	7.52	6.99	6.65	411.4	441.4	6.98	10.67	14.55	411.4	441.4	1.46	1.28	1.11				
411.4	441.4	8.00	7.31	6.85	491.7	521.7	8.06	11.52	13.27	491.7	521.7	1.37	1.33	1.15				
491.7	521.7	8.26	7.41	6.94	572.0	602.0	8.25	11.09	12.92	572.0	602.0	1.31	1.22	1.08				
572.0	602.0	8.39	7.53	7.09	652.2	682.2	7.07	9.47	11.58	652.2	682.2	1.07	0.88	0.75				
652.2	682.2	8.67	7.94	7.49	732.5	762.5	7.24	8.50	9.87	732.5	762.5	0.98	0.73	0.57				
732.5	762.5	8.46	8.00	7.66	812.8	842.8	8.69	9.70	10.71	812.8	842.8	0.91	0.66	0.51				
812.8	842.8	8.06	7.68	7.47	893.1	923.1	9.20	10.45	11.13	893.1	923.1	0.90	0.63	0.47				
893.1	923.1	7.79	7.39	7.20	973.3	1003.3	8.55	10.43	11.89	973.3	1003.3	0.71	0.51	0.40				
973.3	1003.3	7.59	7.30	7.08	1053.6	1083.6	9.42	10.99	11.54	1053.6	1083.6	0.61	0.41	0.30				
1053.6	1083.6	7.39	7.12	7.00	1133.9	1163.9	11.66	12.60	13.74	1133.9	1163.9	0.50	0.27	0.17				
1133.9	1163.9	7.25	6.98	6.89	1214.1	1244.1	18.66	17.70	20.55	1214.1	1244.1	0.56	0.29	0.16				
1214.1	1244.1	7.30	6.94	6.81	1294.4	1324.4	11.67	16.76	21.34	1294.4	1324.4	0.73	0.46	0.29				
1294.4	1324.4	7.75	7.22	7.05	1374.7	1404.7	12.88	24.21	17.71	1374.7	1404.7	0.64	0.50	0.36				
1374.7	1404.7	8.21	7.49	7.20	1454.9	1484.9	14.67	15.99	19.17	1454.9	1484.9	0.61	0.51	0.38				
1454.9	1484.9	8.26	7.52	7.20	1535.2	1565.2	10.93	12.87	14.11	1535.2	1565.2	0.61	0.53	0.42				
1535.2	1565.2	8.27	7.53	7.15	1615.5	1645.5	9.39	10.53	11.22	1615.5	1645.5	0.61	0.47	0.39				
1615.5	1645.5	8.23	7.60	7.18	1695.7	1725.7	9.60	10.04	11.48	1695.7	1725.7	0.66	0.46	0.35				
1695.7	1725.7	8.06	7.58	7.20	1776.0	1806.0	10.13	9.88	10.81	1776.0	1806.0	0.66	0.49	0.36				
1776.0	1806.0	7.91	7.47	7.16	1856.3	1886.3	9.61	10.51	11.29	1856.3	1886.3	0.75	0.53	0.40				
1856.3	1886.3	7.91	7.38	7.12	1936.5	1966.5	8.64	9.42	10.48	1936.5	1966.5	0.88	0.65	0.48				
1936.5	1966.5	7.87	7.41	7.15	2016.8	2046.8	9.51	9.80	10.45	2016.8	2046.8	0.88	0.65	0.49				
2097.1	2127.1	7.79	7.49	7.30	2097.1	2127.1	10.50	11.86	14.21	2097.1	2127.1	0.83	0.62	0.47				
2157.3	2187.3	7.85	7.51	7.37	2157.3	2187.3	10.78	12.27	12.94	2157.3	2187.3	0.80	0.59	0.46				
2237.5	2267.5	7.87	7.54	7.39	2237.5	2267.5	12.18	12.75	13.62	2237.5	2267.5	0.67	0.47	0.41				
2297.8	2327.8	7.99	7.63	7.50	2297.8	2327.8	12.46	13.48	14.32	2297.8	2327.8	0.60	0.42	0.35				
2378.0	2408.0	8.21	7.88	7.74	2378.0	2408.0	13.47	13.14	17.04	2378.0	2408.0	0.56	0.36	0.30				
2438.2	2468.2	8.37	8.05	7.97	2438.2	2468.2	14.42	13.70	15.59	2438.2	2468.2	0.55	0.33	0.25				
2518.5	2548.5	8.54	8.22	8.08	2518.5	2548.5	14.20	15.32	14.91	2518.5	2548.5	0.51	0.33	0.26				
2578.7	2608.7	8.65	8.32	8.22	2578.7	2608.7	14.06	15.37	15.90	2578.7	2608.7	0.48	0.30	0.22				
2659.0	2689.0	8.94	8.62	8.49	2659.0	2689.0	16.80	17.72	14.01	2659.0	2689.0	0.51	0.33	0.25				
2719.2	2749.2	9.18	8.84	8.69	2719.2	2749.2	17.21	15.98	17.07	2719.2	2749.2	0.47	0.32	0.26				
2799.4	2829.4	9.56	9.22	9.04	2799.4	2829.4	16.56	15.87	20.16	2799.4	2829.4	0.43	0.24	0.18				
2859.6	2889.6	9.71	9.52	9.37	2859.6	2889.6	19.02	20.45	19.16	2859.6	2889.6	0.44	0.25	0.17				
2939.9	2969.9	10.24	9.97	9.78	2939.9	2969.9	15.39	18.09	23.14	2939.9	2969.9	0.43	0.26	0.17				
3000.1	3030.1	10.57	10.25	10.11	3000.1	3030.1	14.14	16.49	19.13	3000.1	3030.1	0.46	0.27	0.16				

Typical Performance Data

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=1000.1MHz (dB)	IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=10.1MHz (dB)	IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=2000.1MHz (dB)
		@LO (dBm)			@LO (dBm)			@LO (dBm)
		+7			+7			+7
600.0	400.1	8.20	10.0	20.1	6.56	600.0	1400.1	7.84
584.9	415.2	8.23	25.1	35.2	6.49	584.9	1415.2	7.84
569.7	430.4	8.23	40.3	50.4	6.44	569.7	1430.4	7.78
554.6	445.5	8.19	55.4	65.5	6.35	554.6	1445.5	7.74
539.5	460.6	8.18	70.5	80.6	6.35	539.5	1460.6	7.66
524.4	475.7	8.16	85.6	95.7	6.29	524.4	1475.7	7.63
509.2	490.9	8.23	100.8	110.9	6.24	509.2	1490.9	7.50
494.1	506.0	7.83	115.9	126.0	6.24	494.1	1506.0	7.48
479.0	521.1	8.03	131.0	141.1	6.15	479.0	1521.1	7.37
463.8	536.3	8.00	146.2	156.3	6.17	463.8	1536.3	7.33
448.7	551.4	8.00	161.3	171.4	6.16	448.7	1551.4	7.22
433.6	566.5	7.98	176.4	186.5	6.16	433.6	1566.5	7.16
418.5	581.6	7.95	191.5	201.6	6.17	418.5	1581.6	7.11
403.3	596.8	7.92	206.7	216.8	6.13	403.3	1596.8	7.09
388.2	611.9	7.82	221.8	231.9	6.11	388.2	1611.9	7.07
373.1	627.0	7.81	236.9	247.0	6.09	373.1	1627.0	7.00
357.9	642.2	7.67	252.1	262.2	6.10	357.9	1642.2	7.01
342.8	657.3	7.66	267.2	277.3	6.06	342.8	1657.3	6.97
327.7	672.4	7.53	282.3	292.4	6.11	327.7	1672.4	6.99
312.6	687.5	7.47	297.4	307.5	6.08	312.6	1687.5	6.96
297.4	702.7	7.35	312.6	322.7	6.07	297.4	1702.7	6.98
282.3	717.8	7.27	327.7	337.8	6.07	282.3	1717.8	6.97
267.2	732.9	7.21	342.8	352.9	6.04	267.2	1732.9	6.97
252.1	748.0	7.10	357.9	368.0	6.07	252.1	1748.0	6.97
236.9	763.2	7.13	373.1	383.2	6.06	236.9	1763.2	6.98
221.8	778.3	7.06	388.2	398.3	6.12	221.8	1778.3	7.04
206.7	793.4	7.07	403.3	413.4	6.07	206.7	1793.4	6.99
191.5	808.6	7.02	418.5	428.6	6.13	191.5	1808.6	7.04
176.4	823.7	7.04	433.6	443.7	6.13	176.4	1823.7	7.03
161.3	838.8	6.97	448.7	458.8	6.15	161.3	1838.8	7.03
146.2	853.9	6.97	463.8	473.9	6.20	146.2	1853.9	7.00
131.0	869.1	7.00	479.0	489.1	6.20	131.0	1869.1	7.05
115.9	884.2	6.99	494.1	504.2	6.25	115.9	1884.2	7.07
100.8	899.3	7.06	509.2	519.3	6.20	100.8	1899.3	7.08
85.6	914.5	7.04	524.4	534.5	6.30	85.6	1914.5	7.12
70.5	929.6	7.10	539.5	549.6	6.28	70.5	1929.6	7.13
55.4	944.7	7.14	554.6	564.7	6.39	55.4	1944.7	7.22
40.3	959.8	7.24	569.7	579.8	6.44	40.3	1959.8	7.30
25.1	975.0	7.33	584.9	595.0	6.51	25.1	1975.0	7.44
10.0	990.1	7.41	600.0	610.1	6.58	10.0	1990.1	7.53

Typical Performance Data

LO (MHz)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)		
	@LO (dBm)			@LO (dBm)		
	+4	+7	+10	+4	+7	+10
5.0	46.33	46.19	48.51	64.00	67.00	70.00
10.0	46.80	46.23	48.89	64.00	67.00	70.00
90.4	53.69	55.73	57.77	52.76	52.96	53.54
170.6	52.08	54.14	55.95	46.95	47.36	48.35
250.9	50.12	52.11	53.94	42.83	44.04	45.51
331.2	47.74	49.69	51.59	40.41	42.14	43.58
411.4	45.36	47.07	48.84	38.55	40.05	41.20
491.7	44.93	46.82	48.63	38.66	40.37	41.31
572.0	44.08	45.67	47.27	36.49	38.15	39.22
652.2	43.91	45.69	47.39	35.45	37.40	38.20
732.5	44.01	45.87	47.63	35.02	37.43	38.30
812.8	44.07	46.16	48.24	33.97	36.39	37.30
893.1	44.13	46.22	48.22	32.37	34.55	35.43
973.3	43.45	45.88	48.25	30.57	33.20	34.38
1053.6	43.02	45.62	48.43	29.36	31.78	32.81
1133.9	43.29	46.11	49.27	28.00	30.04	30.82
1214.1	44.71	47.33	49.97	26.59	28.28	28.51
1294.4	46.20	48.53	50.34	24.82	26.33	25.95
1374.7	42.10	45.27	46.69	25.12	26.58	25.93
1454.9	39.61	42.36	44.45	30.06	31.55	30.66
1535.2	38.50	40.82	43.47	37.08	38.00	36.65
1615.5	37.67	40.17	42.40	46.51	46.40	44.11
1695.7	37.22	38.98	41.08	50.39	50.28	49.73
1776.0	36.82	38.49	40.21	42.61	43.02	42.36
1856.3	36.57	38.19	39.62	38.58	38.54	37.57
1936.5	36.39	38.00	39.38	36.13	35.57	34.24
2097.1	36.36	37.85	38.46	33.53	32.80	30.65
2157.3	36.19	37.88	38.71	32.33	31.18	28.92
2237.5	36.07	36.69	36.62	30.89	28.96	26.61
2297.8	36.83	39.10	38.90	29.98	27.83	25.13
2378.0	36.35	37.97	38.84	28.62	26.75	24.08
2438.2	37.39	38.80	39.45	27.60	25.77	23.63
2518.5	38.58	41.47	43.54	26.64	24.87	22.93
2578.7	39.88	44.21	48.57	26.32	24.58	22.77
2659.0	41.42	47.44	58.01	26.52	25.04	23.35
2719.2	42.85	48.69	61.97	26.43	25.23	24.11
2799.4	45.79	58.91	51.22	26.61	25.15	24.12
2859.6	48.65	57.64	46.76	26.97	25.38	24.28
2939.9	51.54	52.36	45.51	27.40	25.85	24.75
3000.1	50.03	50.35	43.18	27.71	26.15	25.15

RF (IN) (MHz)	LO (MHz)	RF-IF ISOLATION (dB)		
		@LO (dBm)		
		+4	+7	+10
10.1	40.1	14.15	14.91	15.15
90.4	120.4	19.38	19.68	19.99
170.6	200.6	20.63	21.02	21.40
250.9	280.9	21.98	22.43	22.88
331.2	361.2	22.97	23.49	23.99
411.4	441.4	23.98	24.39	24.77
491.7	521.7	25.83	25.97	26.14
572.0	602.0	27.47	27.12	26.92
652.2	682.2	30.03	29.21	28.74
732.5	762.5	34.71	33.68	32.85
812.8	842.8	37.99	37.48	36.86
893.1	923.1	39.28	39.96	40.37
973.3	1003.3	43.57	45.83	47.20
1053.6	1083.6	50.33	61.92	51.01
1133.9	1163.9	61.51	44.40	40.93
1214.1	1244.1	42.38	40.69	38.54
1294.4	1324.4	34.04	34.40	34.61
1374.7	1404.7	32.70	33.14	33.44
1454.9	1484.9	32.87	33.13	33.27
1535.2	1565.2	33.49	33.99	34.44
1615.5	1645.5	35.24	36.05	36.88
1695.7	1725.7	38.23	39.71	40.67
1776.0	1806.0	40.10	40.76	40.85
1856.3	1886.3	37.66	36.77	35.94
1936.5	1966.5	34.34	33.14	32.26
2016.8	2046.8	30.12	29.21	28.64
2097.1	2127.1	26.63	25.91	25.39
2157.3	2187.3	24.58	23.92	23.51
2237.5	2267.5	22.48	21.96	21.38
2297.8	2327.8	21.01	20.68	20.46
2378.0	2408.0	19.24	19.02	19.07
2438.2	2468.2	18.47	18.37	18.41
2518.5	2548.5	17.87	17.84	18.20
2578.7	2608.7	18.08	18.14	18.36
2659.0	2689.0	18.61	18.99	19.49
2719.2	2749.2	19.60	19.87	20.09
2799.4	2829.4	20.97	21.11	21.19
2859.6	2889.6	21.57	21.55	21.52
2939.9	2969.9	22.15	21.93	21.66
3000.1	3030.1	22.12	21.78	21.47

Typical Performance Data

RF (IN) (MHz)	LO (MHz)	RF VSWR (:1)			LO (MHz)	LO VSWR (:1)			IF (OUT) (MHz)	IF VSWR @LO=2000.1MHz (:1)		
		@LO (dBm)				@LO (dBm)				@LO (dBm)		
		+4	+7	+10		+4	+7	+10		+4	+7	+10
5.0	35.0	3.06	3.19	3.19	5.0	2.29	3.03	4.59	5.0	3.11	3.21	3.24
10.0	40.0	2.54	2.54	2.51	10.0	1.90	2.69	4.03	10.0	1.90	2.08	2.20
90.4	120.4	1.10	1.04	1.07	90.4	1.72	2.52	3.55	25.1	1.41	1.51	1.61
170.6	200.6	1.23	1.15	1.13	170.6	1.75	2.44	3.33	40.3	1.34	1.46	1.56
250.9	280.9	1.39	1.33	1.29	250.9	1.79	2.47	3.35	55.4	1.33	1.46	1.58
331.2	361.2	1.70	1.61	1.55	331.2	1.83	2.45	3.30	70.5	1.29	1.43	1.55
411.4	441.4	2.22	2.08	1.98	411.4	1.83	2.38	3.16	85.6	1.25	1.39	1.52
491.7	521.7	2.82	2.61	2.46	491.7	1.80	2.27	2.98	100.8	1.21	1.36	1.49
572.0	602.0	3.33	3.04	2.85	572.0	1.78	2.17	2.83	115.9	1.19	1.34	1.47
652.2	682.2	3.66	3.46	3.30	652.2	1.84	2.20	2.87	131.0	1.20	1.35	1.48
732.5	762.5	3.65	3.55	3.45	732.5	1.85	2.09	2.64	146.2	1.22	1.36	1.49
812.8	842.8	3.43	3.37	3.31	812.8	1.87	2.00	2.48	161.3	1.19	1.34	1.46
893.1	923.1	3.22	3.15	3.10	893.1	1.92	1.95	2.35	176.4	1.17	1.32	1.45
973.3	1003.3	3.02	2.95	2.88	973.3	1.94	1.87	2.25	191.5	1.16	1.31	1.45
1053.6	1083.6	2.69	2.60	2.57	1053.6	1.94	1.77	2.04	206.7	1.16	1.31	1.45
1133.9	1163.9	2.30	2.18	2.13	1133.9	1.96	1.68	1.90	221.8	1.17	1.30	1.44
1214.1	1244.1	2.06	1.86	1.76	1214.1	1.91	1.61	1.80	236.9	1.16	1.29	1.42
1294.4	1324.4	2.25	2.02	1.89	1294.4	1.92	1.54	1.69	252.1	1.16	1.29	1.42
1374.7	1404.7	2.60	2.35	2.21	1374.7	1.82	1.46	1.58	267.2	1.16	1.30	1.42
1454.9	1484.9	2.67	2.42	2.26	1454.9	1.69	1.38	1.53	282.3	1.16	1.30	1.43
1535.2	1565.2	2.58	2.37	2.20	1535.2	1.57	1.29	1.51	297.4	1.15	1.28	1.41
1615.5	1645.5	2.42	2.25	2.08	1615.5	1.49	1.23	1.53	312.6	1.14	1.27	1.41
1695.7	1725.7	2.20	2.06	1.95	1695.7	1.41	1.18	1.55	327.7	1.15	1.28	1.42
1776.0	1806.0	1.99	1.87	1.78	1776.0	1.30	1.17	1.55	342.8	1.17	1.29	1.43
1856.3	1886.3	1.89	1.77	1.68	1856.3	1.24	1.20	1.59	357.9	1.17	1.29	1.42
1936.5	1966.5	1.85	1.74	1.68	1936.5	1.20	1.23	1.66	373.1	1.16	1.29	1.41
2016.8	2046.8	1.77	1.70	1.64	2016.8	1.19	1.27	1.72	388.2	1.16	1.29	1.42
2097.1	2127.1	1.65	1.62	1.61	2097.1	1.17	1.30	1.73	403.3	1.17	1.31	1.44
2157.3	2187.3	1.59	1.58	1.60	2157.3	1.17	1.33	1.74	418.5	1.19	1.32	1.46
2237.5	2267.5	1.54	1.54	1.57	2237.5	1.19	1.34	1.74	433.6	1.20	1.32	1.46
2297.8	2327.8	1.55	1.55	1.59	2297.8	1.20	1.38	1.75	448.7	1.19	1.31	1.45
2378.0	2408.0	1.53	1.56	1.60	2378.0	1.23	1.38	1.74	463.8	1.20	1.33	1.45
2438.2	2468.2	1.51	1.57	1.64	2438.2	1.23	1.39	1.71	479.0	1.22	1.34	1.47
2518.5	2548.5	1.54	1.61	1.68	2518.5	1.23	1.39	1.72	494.1	1.24	1.36	1.49
2578.7	2608.7	1.60	1.68	1.77	2578.7	1.21	1.36	1.69	509.2	1.25	1.37	1.50
2659.0	2689.0	1.67	1.76	1.83	2659.0	1.20	1.37	1.68	524.4	1.26	1.38	1.51
2719.2	2749.2	1.73	1.82	1.89	2719.2	1.18	1.39	1.69	539.5	1.27	1.40	1.53
2799.4	2829.4	1.85	1.94	2.02	2799.4	1.17	1.42	1.73	554.6	1.29	1.41	1.54
2859.6	2889.6	1.98	2.09	2.17	2859.6	1.17	1.44	1.77	569.7	1.31	1.43	1.55
2939.9	2969.9	2.19	2.27	2.35	2939.9	1.22	1.51	1.84	584.9	1.32	1.44	1.56
3000.1	3030.1	2.32	2.39	2.45	3000.1	1.26	1.56	1.90	600.0	1.34	1.47	1.59

Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	4	38	19	48	24	38	48	65	41	46
1	-	48	+0	30	22	39	38	47	43	49	58	44
2	>100	68	57	58	55	69	65	>78	60	71	76	>78
3	>100	72	70	70	56	70	66	>78	76	>78	75	>78
4	>100	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
5	>100	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
6	>100	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
7	>100	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
8	>100	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
9	>100	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
10	>100	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions: RF IN: 1000.1 MHz; -14.00 dBm.
LO IN: 1030.01 MHz; +7.00 dBm
IF OUT: 29.91 MHz; -21.55 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	14	49	30	59	35	50	62	72	59	57
1	-	44	+0	30	22	39	39	50	47	56	70	55
2	94	61	45	55	45	63	64	80	55	64	74	>88
3	>100	55	53	52	40	53	51	60	61	63	62	68
4	>100	>88	73	83	73	69	67	81	73	86	71	78
5	>100	86	77	68	75	66	57	68	63	71	75	75
6	>100	>88	>88	>88	79	>88	79	78	80	88	83	>88
7	>100	>88	88	>88	87	81	>88	78	72	84	78	83
8	>100	>88	>88	>88	>88	>88	>88	>88	>88	88	>88	>88
9	>100	>88	>88	>88	>88	>88	>88	>88	>88	>88	>88	>88
10	>100	>88	>88	>88	>88	>88	>88	>88	>88	>88	>88	>88
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions: RF IN: 1000.1 MHz; -4.00 dBm.
LO IN: 1030.01 MHz; +7.00 dBm
IF OUT: 29.91 MHz; -11.58 dBm

- Notes: 1. All Harmonics are in (dBc) relative to IF OUTPUT.
2. + entry denotes harmonics are in (dBc) above IF OUTPUT.
3. RF Cal represent the Harmonics level of the RF input signal to the mixer.

REV. X2
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Page 5 of 5



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