

# Texas Instruments High Speed Data Converters

## TRF3704 Harmonic Performance

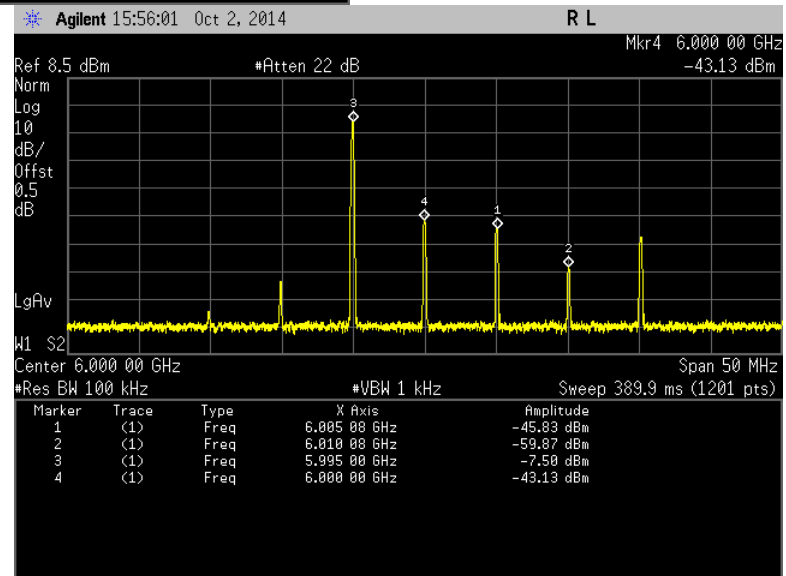
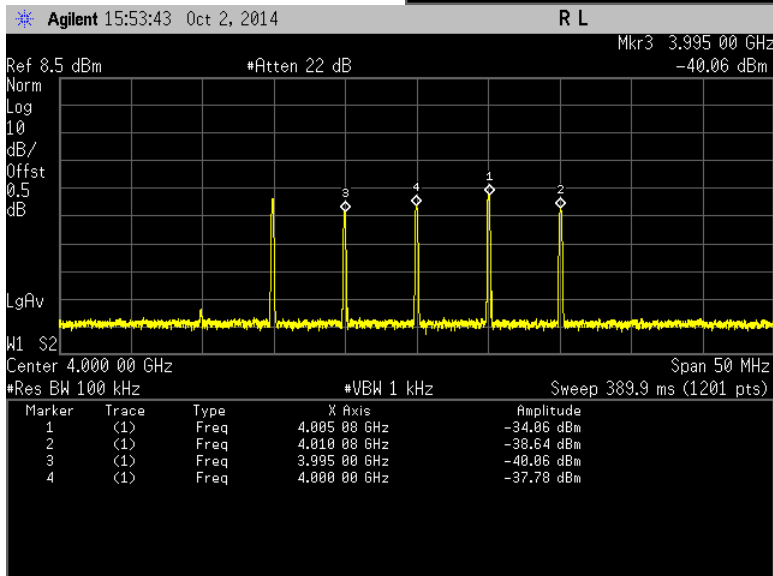
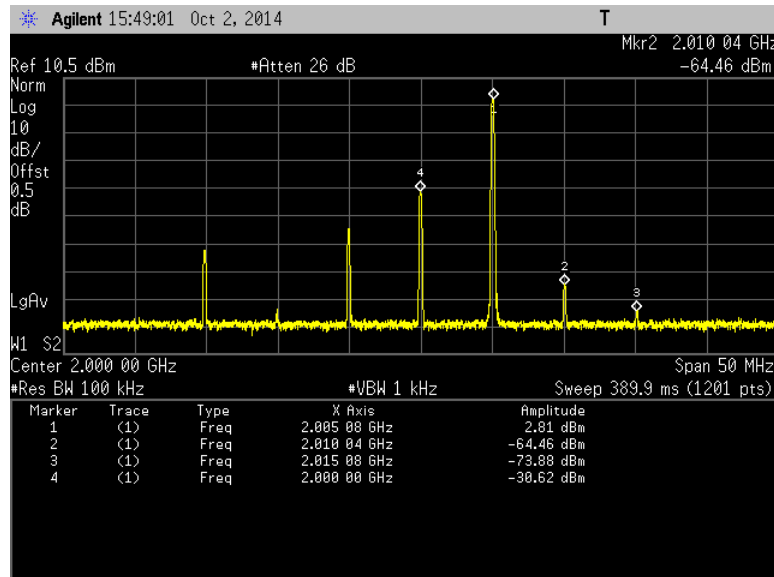
October 2014

# Measurement Set-up

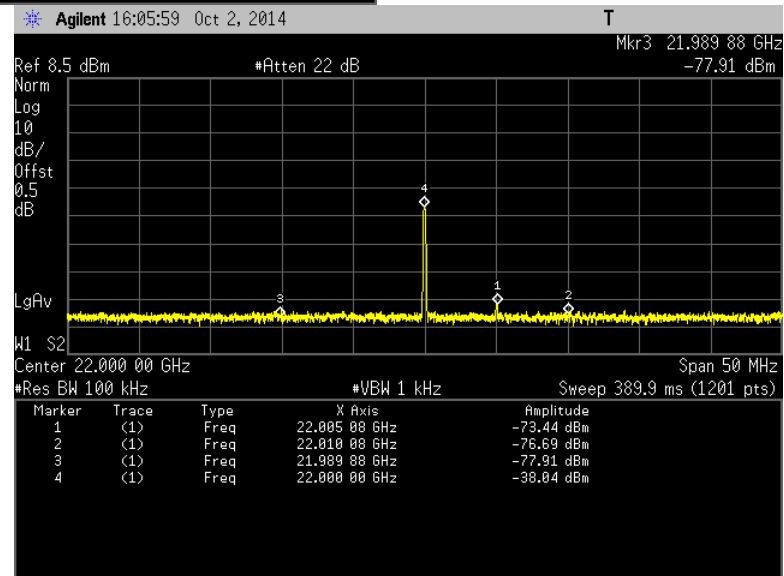
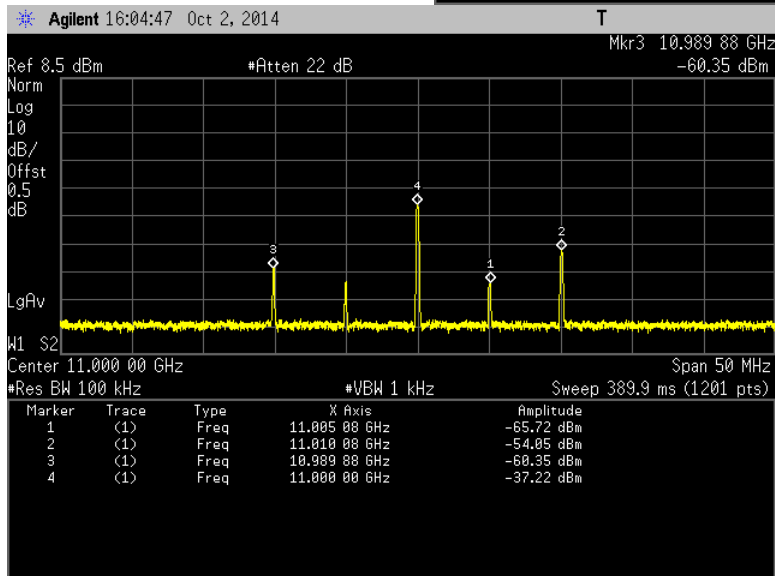
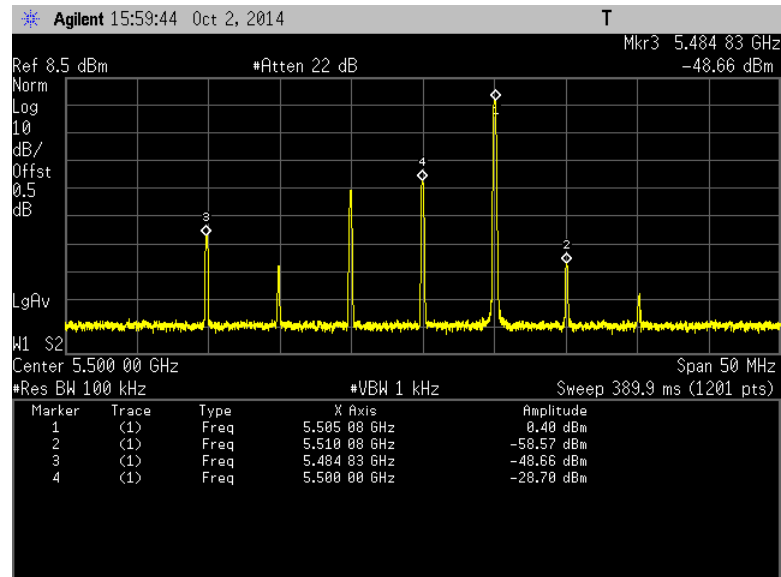
- Utilized TSW38J84 with DAC38J84 driving the TRF3704 Modulator



# LO = 2 GHz ; Harmonic Performance



# LO = 5.5 GHz ; Harmonic Performance



# Data Results (Tabular)

	Offset from LO [MHz]		-15	-10	-5	0	5	10	15
BB [MHz]	F_LO [GHz]	P_LO [dBm]	-HD3BB [dBm]	-HD2BB [dBm]	SB [dBm]	CF [dBm]	Fund [dBm]	HD2BB [dBm]	HD3BB [dBm]
5	2	4	-51.8	-73.9	-43.8	-30.6	2.8	-64.6	-74.8
5	4	4	-75.2	-35.1	-40	-37.8	-34.1	-38.7	-
5	6	4	-75.9	-65.1	-7.5	-43.1	-45.8	-59.8	-48.9
	Offset from LO [MHz]		-15	-10	-5	0	5	10	15
BB [MHz]	F_LO [GHz]	P_LO [dBm]	-HD3BB [dBm]	-HD2BB [dBm]	SB [dBm]	CF [dBm]	Fund [dBm]	HD2BB [dBm]	HD3BB [dBm]
5	5.5	4	-48.7	-59.1	-32.3	-28.8	0.4	-58.5	-68.8
5	11	4	-	-60.1	-64.5	-37.1	-65.3	-53.9	-
5	22	4	-	-	-	-38	-79	-77	-