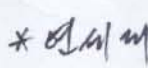


# Technical History

결재	작성	검토		승인	
Model	TR60AK1250	S/N	M0310403001 (#A1)	Assembled	04.03.16

Components	Parameters	Descriptions	Remark
Main Housing	도면번호/ 계정	AK-MH-5966-01-30	
	가공업체	동화정밀	
	표면처리	니켈도금	
LNA	Model/ S/N	#01	@Rx61.9GHz~64.1GHz
	Bias	LNA_Vg=-0.339V, DRA_Vg=-0.182V	
	Gain	30.02~31.74dB	
	Noise Figure		
	Return Loss	-9~-17dB	
DRA	Model/ S/N	#41	@Tx58.9GHz~61.1GHz
	Bias	Vg=-0.170V	
	Gain	12.61~12.82dB	
	P1dB		
	Return Loss	-13~-14dB	
Diplexer	Model/ S/N	Type_B#1	
	L-Band Insertion Loss	2.9dB	
	L-Band Return Loss	-13dB	
	U-Band Insertion Loss	3dB	
	U-Band Return Loss	-11dB	
	Band Rejection	85dB	
Local Oscillator	Model/ S/N	600LV10-03	
	LO Frequency	59.752GHz	
	Output Power		
	Phase Noise		
	Stability		
	Bias		
IF PCB	Model/ S/N		
Bias PCB	Model/ S/N	ME1000 Bias PCB(R2.1) #1	연구2실

Remark	1. LO Port Attenuatro 3dB (3/16)
	2. LO Port Attenuatro 5dB (3/31)
	3.
	4.
	5.
	* 

# RF Test Results

<b>Model</b>	TR60AK1250	<b>S/N</b>	M0310403001 (#A1)	<b>Engineer</b>	YSKIM, JYKIM
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Parameters		Specifications	Measurement		
			1st	2nd	3rd
LO	Power				
	Frequency[ON]	60.000GHz ±50MHz	60.047GHz	60.046GHz	
	Frequency[10min]		60.021GHz		
	Frequency[30min]		59.988GHz[1H]	59.987GHz[12H]	
Modulation	Flatness		±2dB	±2dB	
	Delta	8dBc ~ 10dBc	10.33dB	10.75dB	
	1st Peak Power		-1dBm	-4dBm	
Output Power		+10dBm max	11.64dBm	9.54dBm	
Mixer	Conversion Loss	8~10dB	7dB		
	Flatness	±2.5dB typ	±2.5dB		
Dynamic Range					
Bias Voltage/Current		5V/1500mA typ			

Remark
1. Modulator Bias=0.598V
2. BB Attenuator : 15dB
3. Mixer Bias : 0.635V
4. LO Port Attenuator 5dB로 수정(이전 3dB)(3/31)
5.
6.
7.
8.
9.
10.

# BER Test Results

Model	ASK1250	Date	04.03.31	Engineer	YSKIM, JYKIM
Test Conditions		1250Mbps, PRBS 9, Data 800mV			
Input		BER			
		Tx: #A1	Rx: #B1	Tx: #B1	Rx: #A1
dBm	mVpp	1st	2nd(DX 제거)	1st	2nd(DX 제거)
-65	0.4				
-64	0.4				6.67E-06
-63	0.4		9.37E-07		6.20E-06
-62	0.5		1.04E-07		4.32E-07
-61	0.6		6.40E-09		2.18E-08
-60	0.6		0	4.80E-03	0
-59	0.7		0	1.38E-03	0
-58	0.8	2.23E-05	0	3.04E+04	0
-57	0.9	2.78E-07	0	9.63E-05	0
-56	1.0	2.40E-08	0	2.50E-05	0
-55	1.1	3.40E-09	0	4.06E-06	0
-54	1.3	1.14E-10	0	8.73E-07	0
-53	1.4	0	0	1.27E-07	0
-52	1.6	0	0	1.04E-08	0
-51	1.8	0	0	1.80E-09	0
-50	2.0	0	0	0	0
-49	2.2	0	0	0	0
-48	2.5	0	0	0	0
-47	2.8	0	0	0	0
-46	3.2	0	0	0	0
-45	3.6	0	0	0	0
-44	4.0	0	0	0	0
-43	4.5	0	0	0	0
-42	5.0	0	0	0	0
-41	5.6	0	0	0	0
-40	6.3	0	0	0	0
-39	7.1	0	0	0	0
-38	8.0	0	0	0	0
-37	8.9	0	0	0	0
-36	10.0	0	0	0	0
-35	11.2	0	0	0	0
-34	12.6	0	1.95E-03	0	0
-33	14.2	0		0	0
-32	15.9	0		0	0
-31	17.8	0		0	0
-30	20.0	0		0	0
-29	22.4				
-28	25.2				
-27	28.3				
-26	31.7				
-25	35.6				

Remark
1. (4/1) 16시간 경과 후 정상 동작
2. (4/2) 14시간 경과 후 정상 동작
3.