Sharp North Malaysia Sdn. Bd.

APPROVED	CHECKED	CHECKED	CHECKED	FILLED
K.OKANO 2023.11.17 09:06:07 +08'00'	KHUSAIRY	KW LEE Digitally signed by KW LEE Date: 2023.11.17 07:58:45 +08'00'	CL LEAN 2023.11.17 07:52:04 +08'00'	Sharizal 2023.11.16 17:31:02 +08'00'

PAGE :	1/3
DEPT. :	ENGINEERING
DATE :	16/11/2023
REF. NO :	E1MEC- 23Y0020

ENGINEERING STUDY / ANALYSIS REPORT

SUBJECT : NOISE AND DC LEVEL FOR DCDC IC MC33063ADR PCN

PURPOSE : STUDY NOISE AND DC LEVEL FOR DCDC IC MC33063ADR PCN# 20230417002.1
(Qualification of new Fab site (RFAB) using qualified Process Technology and Die)

MODEL NAME : 8AC22CX1
PART NO. :
SUPPLIER / MAKER :
STUDY STAGE : EVT / DVT / PVT / 1ST LOT / OTHERS:
SAMPLE STAGE : 1ST / 2ND / 3RD SAMPLE / OTHERS:
CHANGE DCDC IC MC33063ADR PCN# 20230417002.1

1. TEST PROCEDURES (CONTENTS) :

1.1 TEST CONDITIONS / ENVIRONMENTS :

AC Supply :	230	V	Frequency :	50	Hz
DC Supply :		V			
Room Temp.:	25	^{O}C	Room Humidity:	52	%
Test Location:	ENGINEERING STUDY ROOM				
Input Source (Test Signal):	PLAYBACK SONG		Function Mode:	USB	
Volume Setting:	15	EQ Setting:	Flat	Bass / Treble:	
Output Level:		V		% THD	
Speaker Load / Dummy Impedance :			4	Ohms	

1.2 TEST EQUIPMENTS / TOOLS :

Equipment Name :	EXTECH AC POWER SOURCE
Model No :	6800 SERIES
Serial Number :	
Equipment Name :	YOKOGAWA OSCILLOSCOPE
Model No :	DLM2024
Serial Number :	SR024103
Equipment Name :	
Model No :	
Serial Number :	
Equipment Name :	
Model No :	
Serial Number :	

2.RESULTS / DATA :

2.1 OBSERVATIONS / FINDINGS :	2.2 ATTACHED DATA / DOCUMENTS : (PLEASE SPECIFY)
1. Noise level for MC33063ADR PCN# 20230417002.1 increase 40% compare	
previous MC33063ADR	

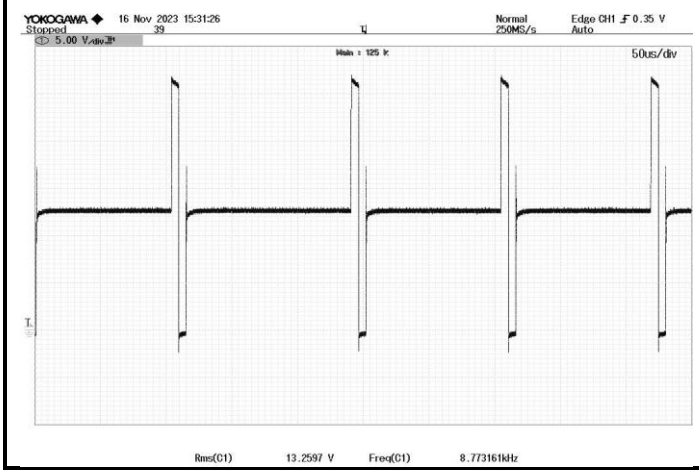
3. CONCLUSION :

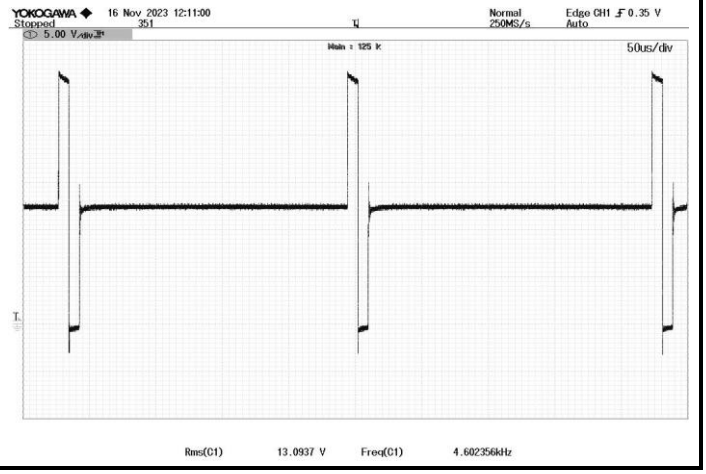
OK	OK (WITH CONDITION)	NG (NEED IMPROVE)	CAN'T IMPROVE
		O	

REMARKS:

DCDC IC MC33063ADR Before Coil

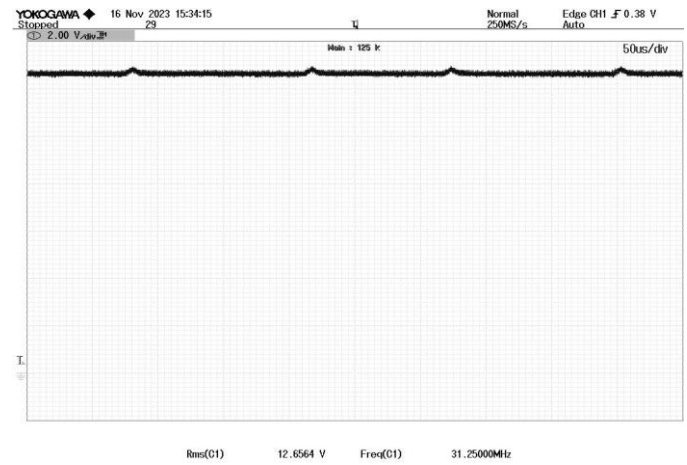
Current DCDC IC MC33063ADR	DCDC IC MC33063ADR PCN# 20230417002.1

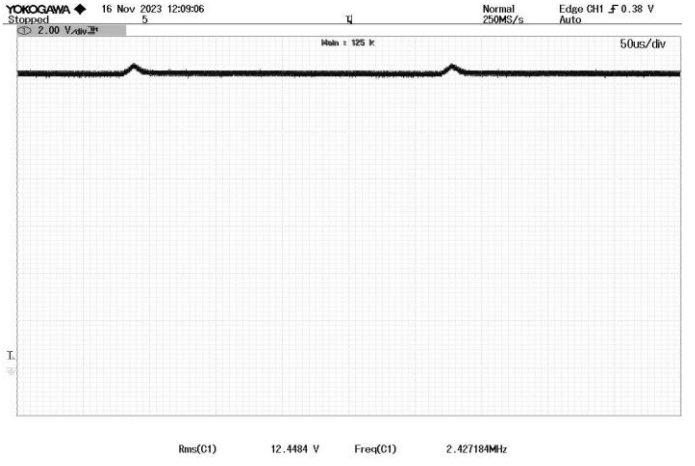




DCDC IC MC33063ADR DC LEVEL After Coil

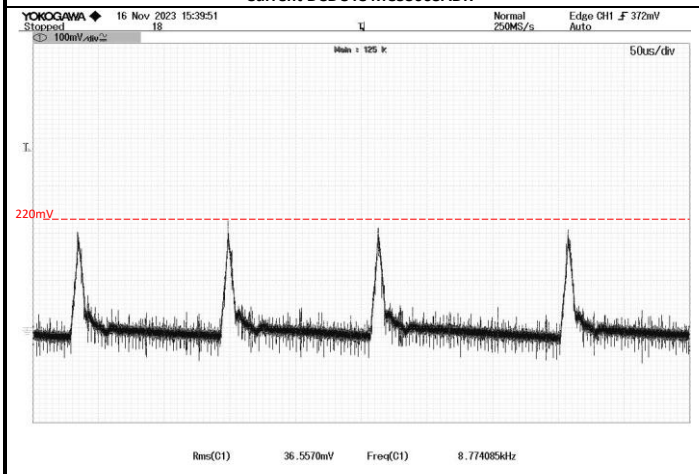
Current DCDC IC MC33063ADR	DCDC IC MC33063ADR PCN# 20230417002.1

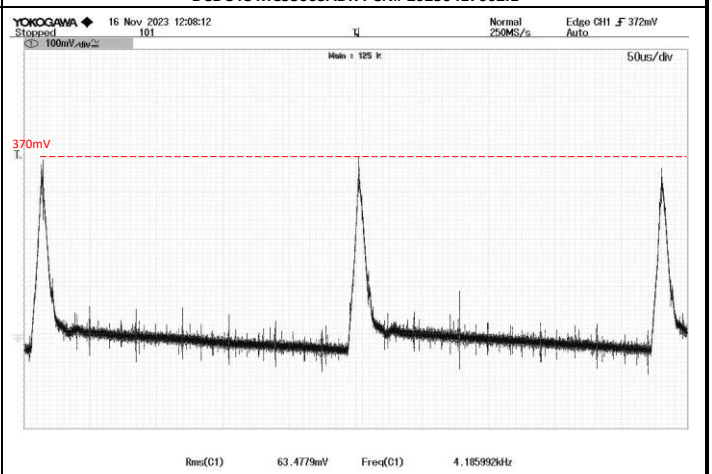




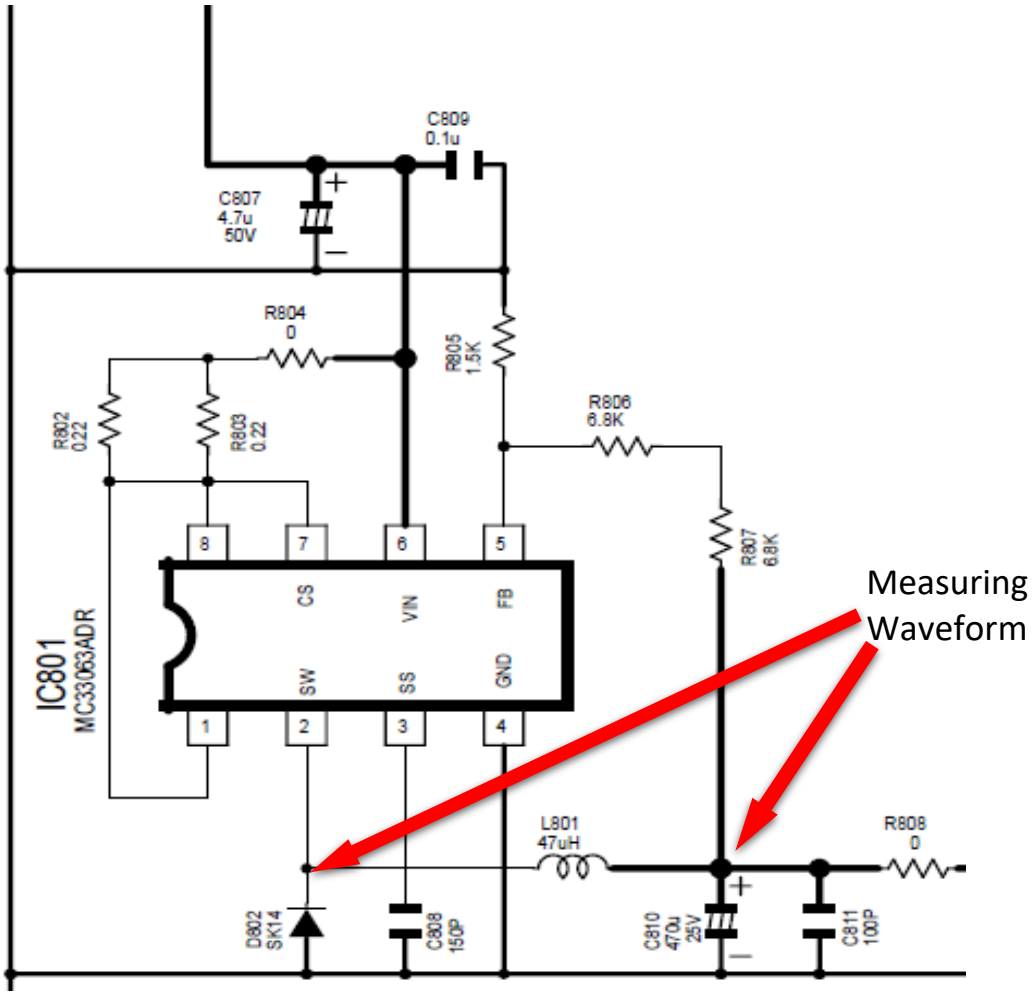
DCDC IC MC33063ADR NOISE After Coil

Current DCDC IC MC33063ADR	DCDC IC MC33063ADR PCN# 20230417002.1





Schematic


C809
0.1u
C807
4.7u
50V
R804
0
R805
1.5K
R806
6.8K
R807
6.8K
R802
0.22
R803
0.22
IC801
MC33063ADR
CS
VIN
FB
SW
SS
GND
L801
47uH
R808
0
D802
SK14
C808
150P
C810
470u
25V
C811
100P
Measuring
Waveform