

# Test Results

**RF Amp & ASIC  
Test Results**

- PCB A Pass
- PCB B Pass
- PCB C Pass
- PCB D Pass

## Fail

Vision Detector PCB Panel Assembly Functional Test

Test Date: 2021-05-04 13:06:29

Supplier: Jabil

Technician: User1

Customer: Siemens

Test Station: OSP\_PCB\_FT\_01

Test Software Revision: 04

Test Parameters Match Initialization File: FALSE

Year of Manufacture: 2021

Siemens PCBA Part Number: 10752680

Siemens PCBA Revision: 03

Panel Serial Number: RBM03W15081 - Fail

PCB D Serial Number: RBM03W15081D - Pass \*\*Not all Test Performed. No Data Written to EEPROM!\*\*

PCB C Serial Number: RBM03W15081C - Pass \*\*Not all Test Performed. No Data Written to EEPROM!\*\*

PCB B Serial Number: RBM03W15081B - Pass \*\*Not all Test Performed. No Data Written to EEPROM!\*\*

PCB A Serial Number: RBM03W15081A - Fail

Test Description:

Test 1 - RF Amp & ASIC Trigger Test, ASIC 0

PCB Serial Number:

RBM03W15081D

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 26.437, IC2: 26.187; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 27.937, IC2: 27.562; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 2 - RF Amp & ASIC Trigger Test, ASIC 1

PCB Serial Number:

RBM03W15081D

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 26.437, IC2: 26.187; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 27.937, IC2: 27.562; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 3 - RF Amp & ASIC Trigger Test, ASIC 2

PCB Serial Number:

RBM03W15081D

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 26.437, IC2: 26.187; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 27.937, IC2: 27.562; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 4 - RF Amp & ASIC Trigger Test, ASIC 3

PCB Serial Number:

RBM03W15081D

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 26.437, IC2: 26.187; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 27.937, IC2: 27.562; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 5 - RF Amp & ASIC Trigger Test, ASIC 4

PCB Serial Number:

RBM03W15081D

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 26.437, IC2: 26.187; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 27.937, IC2: 27.562; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 6 - RF Amp & ASIC Trigger Test, ASIC 5

PCB Serial Number:

RBM03W15081D

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 26.437, IC2: 26.187; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 27.937, IC2: 27.562; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 7 - RF Amp & ASIC Trigger Test, ASIC 6

PCB Serial Number:

RBM03W15081D

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 26.437, IC2: 26.187; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 27.937, IC2: 27.562; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 8 - RF Amp & ASIC Trigger Test, ASIC 7

PCB Serial Number:

RBM03W15081D

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 26.437, IC2: 26.187; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 27.937, IC2: 27.562; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 9 - RF Amp & ASIC Trigger Test, ASIC 0

PCB Serial Number:

RBM03W15081C

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 27.125, IC2: 26.937; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.812, IC2: 28.375; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 10 - RF Amp & ASIC Trigger Test, ASIC 1

PCB Serial Number:

RBM03W15081C

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 27.125, IC2: 26.937; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.812, IC2: 28.375; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 11 - RF Amp & ASIC Trigger Test, ASIC 2

PCB Serial Number:

RBM03W15081C

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 27.125, IC2: 26.937; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.812, IC2: 28.375; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 12 - RF Amp & ASIC Trigger Test, ASIC 3

PCB Serial Number:

RBM03W15081C

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 27.125, IC2: 26.937; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.812, IC2: 28.375; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 13 - RF Amp & ASIC Trigger Test, ASIC 4

PCB Serial Number:

RBM03W15081C

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 27.125, IC2: 26.937; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.812, IC2: 28.375; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 14 - RF Amp & ASIC Trigger Test, ASIC 5

PCB Serial Number:

RBM03W15081C

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 27.125, IC2: 26.937; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.812, IC2: 28.375; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 15 - RF Amp & ASIC Trigger Test, ASIC 6

PCB Serial Number:

RBM03W15081C

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 27.125, IC2: 26.937; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.812, IC2: 28.375; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 16 - RF Amp & ASIC Trigger Test, ASIC 7

PCB Serial Number:

RBM03W15081C

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 27.125, IC2: 26.937; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.812, IC2: 28.375; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 17 - RF Amp & ASIC Trigger Test, ASIC 0

PCB Serial Number:

RBM03W15081B

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 0.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 27.187, IC2: 27.312; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.812, IC2: 28.687; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 18 - RF Amp & ASIC Trigger Test, ASIC 1

PCB Serial Number:

RBM03W15081B

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):



IC1: 27.187, IC2: 27.312; Temp OK - Pass  
Ending Temperature (Max 50.00 C):  
IC1: 28.812, IC2: 28.687; Temp OK - Pass  
Test Result:  
Pass

Test Description:  
Test 19 - RF Amp & ASIC Trigger Test, ASIC 2  
PCB Serial Number:  
RBM03W15081B  
Test Lower Limit:  
N/A  
Test Upper Limit:  
100.000000 (mV)  
Test Measurement:  
Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments  
Units:  
mVDC  
Starting Temperature (Max 50.00 C):  
IC1: 27.187, IC2: 27.312; Temp OK - Pass  
Ending Temperature (Max 50.00 C):  
IC1: 28.812, IC2: 28.687; Temp OK - Pass  
Test Result:  
Pass

Test Description:  
Test 20 - RF Amp & ASIC Trigger Test, ASIC 3  
PCB Serial Number:  
RBM03W15081B  
Test Lower Limit:  
N/A  
Test Upper Limit:  
100.000000 (mV)  
Test Measurement:  
Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments  
Units:  
mVDC  
Starting Temperature (Max 50.00 C):  
IC1: 27.187, IC2: 27.312; Temp OK - Pass  
Ending Temperature (Max 50.00 C):  
IC1: 28.812, IC2: 28.687; Temp OK - Pass  
Test Result:  
Pass

Test Description:  
Test 21 - RF Amp & ASIC Trigger Test, ASIC 4  
PCB Serial Number:  
RBM03W15081B

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 27.187, IC2: 27.312; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.812, IC2: 28.687; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 22 - RF Amp & ASIC Trigger Test, ASIC 5

PCB Serial Number:

RBM03W15081B

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 27.187, IC2: 27.312; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.812, IC2: 28.687; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 23 - RF Amp & ASIC Trigger Test, ASIC 6

PCB Serial Number:

RBM03W15081B

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 0.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 27.187, IC2: 27.312; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.812, IC2: 28.687; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 24 - RF Amp & ASIC Trigger Test, ASIC 7

PCB Serial Number:

RBM03W15081B

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 27.187, IC2: 27.312; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.812, IC2: 28.687; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 25 - RF Amp & ASIC Trigger Test, ASIC 0

PCB Serial Number:

RBM03W15081A

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 0.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 26.750, IC2: 26.875; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.187, IC2: 28.125; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 26 - RF Amp & ASIC Trigger Test, ASIC 1

PCB Serial Number:

RBM03W15081A

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 0.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 26.750, IC2: 26.875; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.187, IC2: 28.125; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 27 - RF Amp & ASIC Trigger Test, ASIC 2

PCB Serial Number:

RBM03W15081A

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 26.750, IC2: 26.875; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.187, IC2: 28.125; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 28 - RF Amp & ASIC Trigger Test, ASIC 3

PCB Serial Number:

RBM03W15081A

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Fail

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 26.750, IC2: 26.875; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.187, IC2: 28.125; Temp OK - Pass

Test Result:

Fail

Notes:

0 Pulse(s), Pulse Width (ns): 0

Test Description:

Test 29 - RF Amp & ASIC Trigger Test, ASIC 4

PCB Serial Number:

RBM03W15081A

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 26.750, IC2: 26.875; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.187, IC2: 28.125; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 30 - RF Amp & ASIC Trigger Test, ASIC 5

PCB Serial Number:

RBM03W15081A

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 26.750, IC2: 26.875; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.187, IC2: 28.125; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 31 - RF Amp & ASIC Trigger Test, ASIC 6

PCB Serial Number:

RBM03W15081A

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 26.750, IC2: 26.875; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.187, IC2: 28.125; Temp OK - Pass

Test Result:

Pass

Test Description:

Test 32 - RF Amp & ASIC Trigger Test, ASIC 7

PCB Serial Number:

RBM03W15081A

Test Lower Limit:

N/A

Test Upper Limit:

100.000000 (mV)

Test Measurement:

Pass - Successfully triggered from 100.000000 to 10.000000 (mV) in 10.000000 (mV) Increments

Units:

mVDC

Starting Temperature (Max 50.00 C):

IC1: 26.750, IC2: 26.875; Temp OK - Pass

Ending Temperature (Max 50.00 C):

IC1: 28.187, IC2: 28.125; Temp OK - Pass

Test Result:

Pass

Test Parameters:

Test Station="OSP\_PCB\_FT\_01"

[PCB Current]

Set DC Voltage (V)="5.000"

Set DC Current Limit (A)="4.000"

Upper Voltage Limit="5.100"

Lower Voltage Limit="4.900"

Power Off Upper Current Limit="2.300"

Power Off Lower Current Limit="2.100"

Power On Upper Current Limit="2.650"

Power On Lower Current Limit="2.450"

ASIC Loaded Upper Current Limit="3.000"

ASIC Loaded Lower Current Limit="2.700"

[DAC Calibration]

DAC Calibration Tolerance="0.015"

Low Voltage Value="1.000"

Mid Voltage Value="2.000"

High Voltage Value="2.600"

Overtemp Threshold="50.000"

Detector Power On Delay="0.100"

[TLE In/Out]

ASIC Off High Limit="0.100"

ASIC Off Low Limit="-0.100"

ASIC On High Limit="0.700"

ASIC On Low Limit="0.480"

ASIC Bias High Limit="2.800"

ASIC Bias Low Limit="2.500"

[RF Amp & ASIC Test & LED Reset]

Starting Pulse Amplitude (mV)="100.000"

Decreasing Trigger Delta (mV)="10.000"

Pulse Width (ns)="10.000"

Trigger Width Lower Limit (ns)="40.000"

Trigger Width Upper Limit (ns)="60.000"

Number of Acceptable Pulses="1.000"

[File Locations]

Test Report Folder Location="C:\Test Reports"

.tar File Folder Location="C:\Tars"

[Tests to Perform]

PCB Current Test="FALSE"

EEPROM Test="FALSE"

TLE In Test="FALSE"  
TLE Out Test="TRUE"  
RF Amps & ASICs Test="TRUE"  
Reset Test="FALSE"  
Calibrate DACs Test="FALSE"

[PCBs to Test]  
Test PCB1="TRUE"  
Test PCB2="TRUE"  
Test PCB3="TRUE"  
Test PCB4="TRUE"

[Part Number]  
O="10748016"  
R="10752680"

[Manufacturer]  
A="IES"  
B="Jabil"  
C="Epic"  
D="CV"  
Z="Prototype"

[Year]  
A="2009"  
B="2010"  
C="2011"  
D="2012"  
E="2013"  
F="2014"  
G="2015"  
H="2016"  
I="2017"  
J="2018"  
K="2019"  
L="2020"  
M="2021"  
N="2022"  
O="2023"  
P="2024"  
Q="2025"

[Dogbone]  
10748016="standard"  
10752680="dogbone"