

# NA-1429

BLS6G3135-120 at 3100-3500 MHz

Rev. 2 — 28 April 2015

Application Measurement  
Report

## Document information

| Info     | Content                                                                      |
|----------|------------------------------------------------------------------------------|
| Keywords | NA-1429                                                                      |
| Abstract | Measurement results of a demo board for 3100-3500 MHz with 1x BLS6G3135-120. |



## Revision history

| Rev | Date     | Description                |
|-----|----------|----------------------------|
| 1   | 20111213 |                            |
| 2   | 20150424 | Update for web publication |

## Contact information

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## 1. Introduction

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### 1.1 General information

This report gives the test results for a 3100-3500MHz demo amplifier (Board NA-1429), using the NXP LDMOS transistor **BLS6G3135-120**. The following test has been performed:

- Pulsed CW @  $V_{DS}=32V$ ,  $I_{DQ}=100mA$ ,  $t_p=300\mu s$ ,  $\delta=10\%$

All testing has been performed at  $V_{DS}=32V$ ,  $I_{DQ}=100mA$  and  $T_H=25^\circ C$ . Data is presented in graphical format.

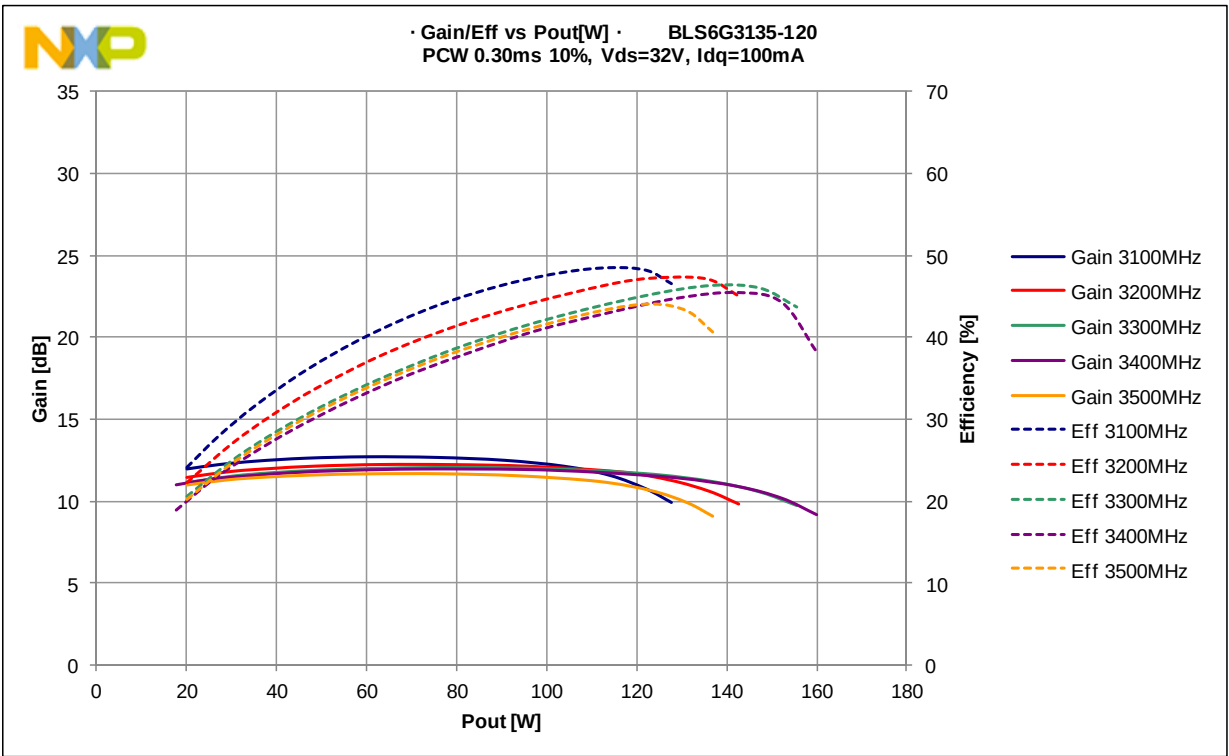
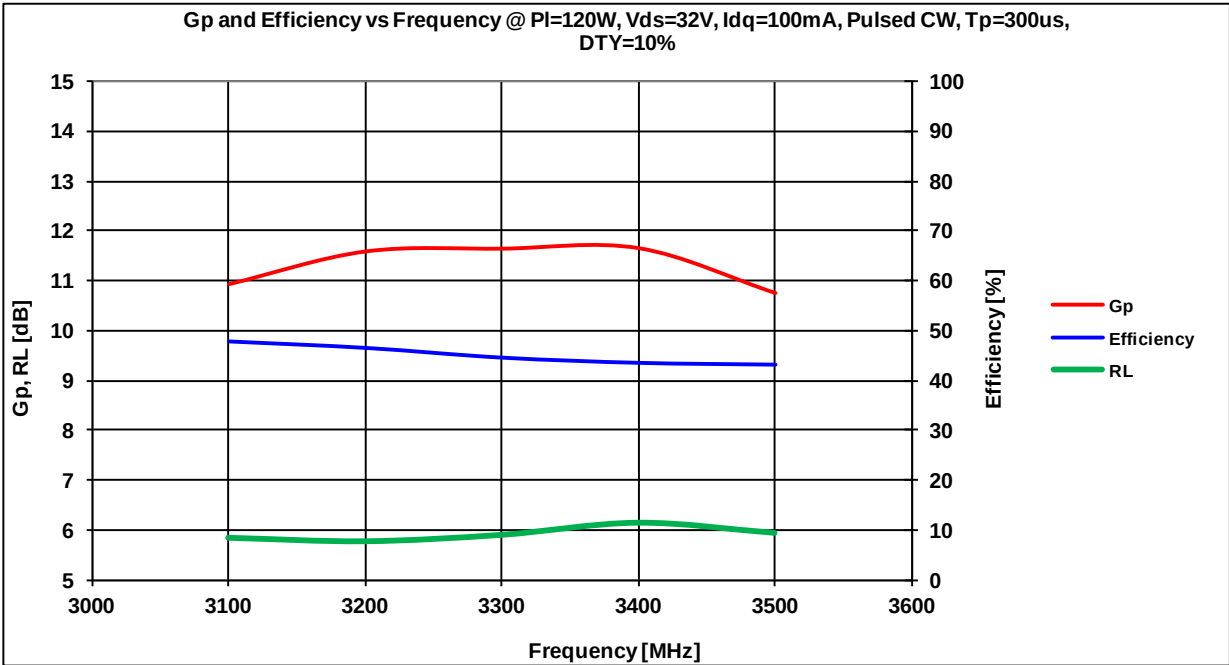
*NOTE: Use an Electrolytic Capacitor of 10000uF parallel to the  $V_{DS}$  as close as possible to the demo board. This delivers the current peaks to the demo board.*

### 1.2 Test circuit

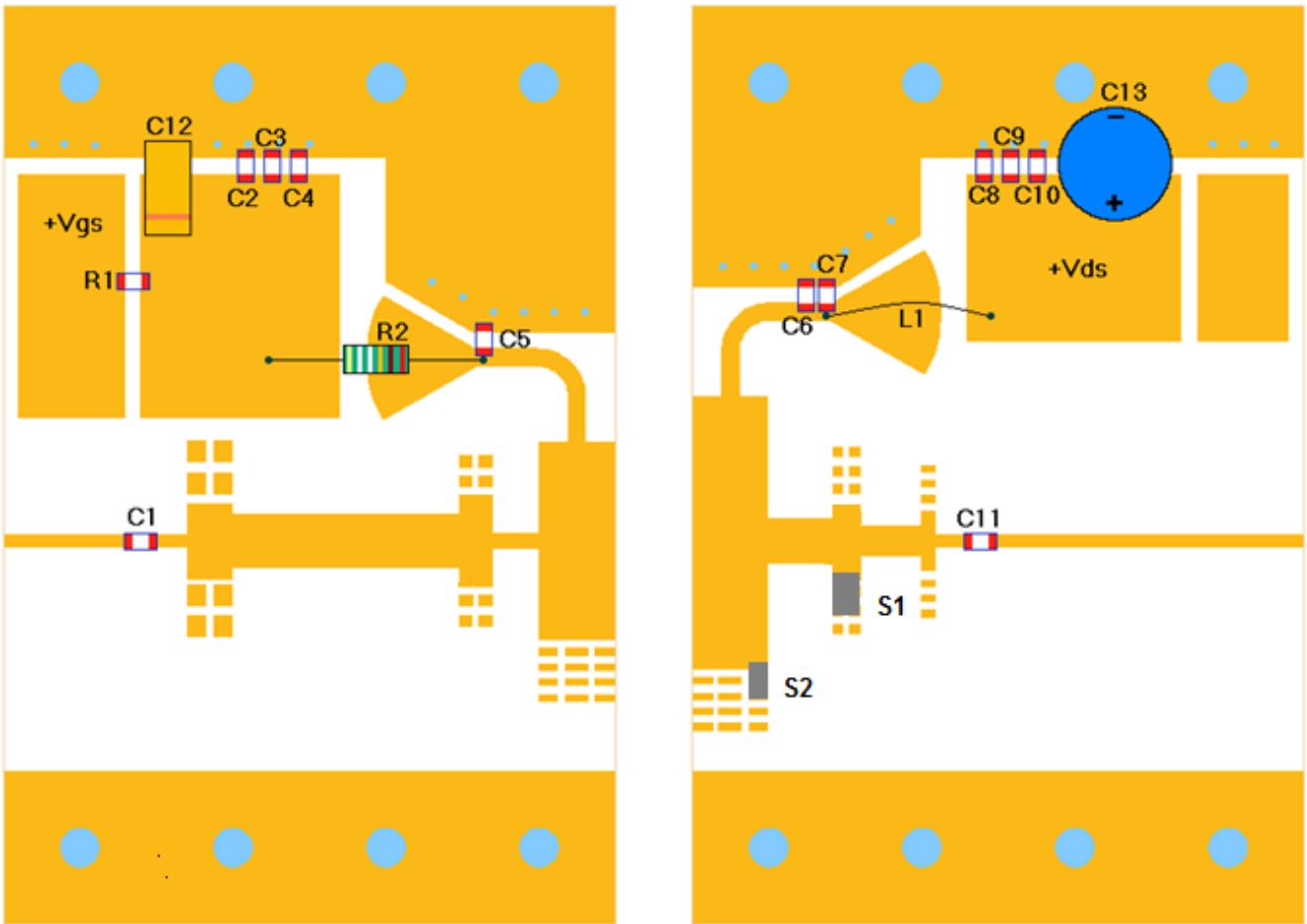
A description of this circuit can be found in **chapter** Error! Reference source not found.. The test circuit has been designed on Duriod 6006, 0.64mm thick,  $\epsilon_r=6.16$ .

2. Measurement Results

2.1 Test Results Frequency Sweep and Power Sweep:

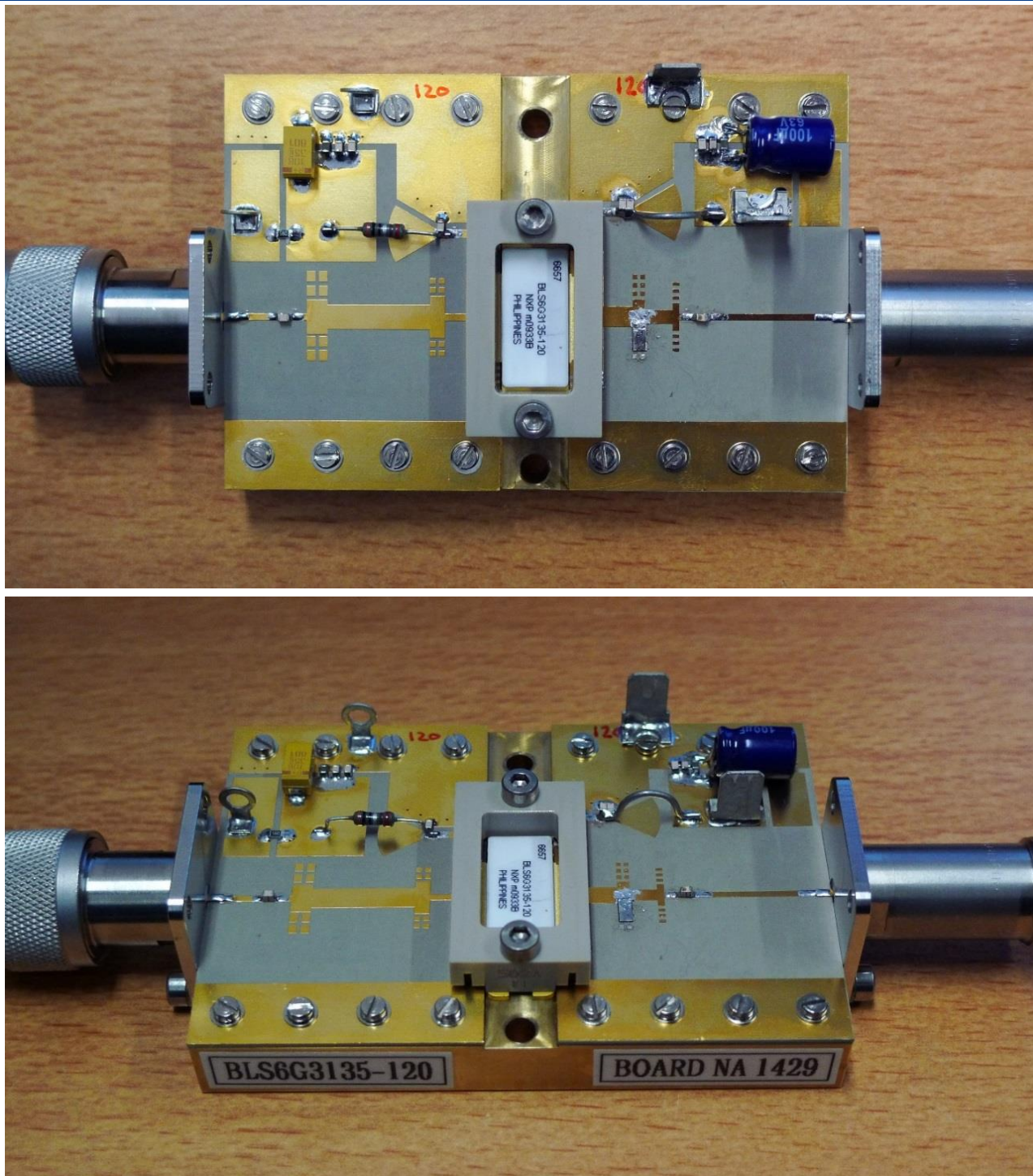


3. Test Circuit and List of Components



| List of components                                 |                                       |
|----------------------------------------------------|---------------------------------------|
| Component                                          | Description                           |
| C1,C3,C4,C5,C6,C7,C8,C9,C11                        | 24pF ATC100A                          |
| C2,C10                                             | 1nF ATC700A                           |
| C12                                                | 47uF/20V Tantalum                     |
| C13                                                | 100uF/63V                             |
| R1                                                 | 56 Ohm SMD                            |
| R2                                                 | 49.9 Ohm / 0.6W MetalFilm             |
| S1                                                 | Metal Strip                           |
| L1                                                 | Copper wire 1mm diameter, length=16mm |
| Pcb-material=Duriod 6006,E r=6.16, H=0.64mm, 2x Cu |                                       |

#### 4. Photos Demo Board



#### 5. Attachments

Please see the attachment for the support files.

## 6. Legal information

### 6.1 Definitions

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