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About Document

Version History

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Scope

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1 Introduction

1.1 Purpose of the document

Based on module AT command manual, this document will introduce CTBURST application process. Developers could understand and develop application quickly and efficiently based on this document. The function only used to do RF TX burst test, not used to make production test.

1.2 Related documents


1.3 Conventions and abbreviations

In this document, the GSM engines are referred to as following term:
ME (Mobile Equipment);
MS (Mobile Station);
TA (Terminal Adapter);
DCE (Data Communication Equipment) or facsimile DCE (FAX modem, FAX board);

In application, controlling device controls the GSM engine by sending AT Command via its serial interface. The controlling device at the other end of the serial line is referred to as following term:
TE (Terminal Equipment);
DTE (Data Terminal Equipment) or plainly "the application" which is running on an embedded system;
2 CTBURST Introduction

CTBURST command is used to start or stop continuous burst transmitting for production verification test at manufacturer.
### 3 AT Commands for CTBURST

<table>
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<tr>
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<th>Description</th>
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<tr>
<td>AT+CTBURST</td>
<td>The RF TX Burst Test</td>
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#### 3.1 AT+CTBURST The RF TX Burst Test

**Write Command**

```plaintext
AT+CTBURST=<mode>[,<band>,<channel>,<power>]
```

**Response**

- OK
- ERROR

**Parameter Saving Mode**

- NO_SAVE

**Max Response Time**

- 

**Reference**

**Defined Values**

- **<mode>**
  - 0: Stop RF Tx Test
  - 1: Start RF Tx Test

- **<band>**
  - 1: LTE 1 Band
  - 2: LTE 2 Band
  - 3: LTE 3 Band
  - 4: LTE 4 Band
  - 5: LTE 5 Band
  - 8: LTE 8 Band
  - 12: LTE 12 Band
  - 13: LTE 13 Band
  - 18: LTE 18 Band
  - 19: LTE 19 Band
  - 20: LTE 20 Band
  - 26: LTE 26 Band
  - 28: LTE 28 Band

- **<channel>**
  - Frequency channel
  - 18000~18599 LTE 1 Band
  - 18600~19199 LTE 2 Band
  - 19200~19949 LTE 3 Band
### Power

<table>
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<tr>
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<th>Description</th>
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<td>19950~20399</td>
<td>LTE 4 Band</td>
</tr>
<tr>
<td>20400~20649</td>
<td>LTE 5 Band</td>
</tr>
<tr>
<td>21450~21799</td>
<td>LTE 8 Band</td>
</tr>
<tr>
<td>23010~23179</td>
<td>LTE 12 Band</td>
</tr>
<tr>
<td>23180~23279</td>
<td>LTE 13 Band</td>
</tr>
<tr>
<td>23850~23999</td>
<td>LTE 18 Band</td>
</tr>
<tr>
<td>24000~24149</td>
<td>LTE 19 Band</td>
</tr>
<tr>
<td>24150~24449</td>
<td>LTE 20 Band</td>
</tr>
<tr>
<td>26690~27039</td>
<td>LTE 26 Band</td>
</tr>
<tr>
<td>27210~27659</td>
<td>LTE 28 Band</td>
</tr>
</tbody>
</table>

### NOTE

- Customer must set AT+CFUN=0 firstly and AT*MCALDEV=1 secondly before this command.
- If <mode>=0, other parameters are not required, it will stop the current starting RF band test, otherwise it return error.
- If <mode>=1, all the other parameters are required.
- <band> refer to hardware doc, not support all band.
- After set <mode>=1, if change other parameters to test, the customer should set AT+CTBURST=0, then test again.
- After set <mode>=0, and not use this command, you should set AT*MCALDEV=0 firstly and set AT+CFUN=1 secondly.
## 4 CTBURST Examples

```plaintext
//Example of CTBURST.

AT+CFUN=0
OK //Set minimum functionality

AT*MCALDEV=1
OK //Enter RF calibration state.

AT+CTBURST=1,28,27210,20
OK //Start CTBURST with LTE band.

AT+CTBURST=0
OK //Stop CTBURST.

AT+CTBURST=1,8,21450,10
OK //Start CTBURST with another LTE band.

AT+CTBURST=0
OK //Stop CTBURST.

AT+CTBURST=1,8,21450,10
OK //Start CTBURST with another LTE band

AT+CTBURST=0
OK //Stop CTBURST.

AT*MCALDEV=0
OK //Exit RF calibration state

AT+CFUN=1
OK //Set full functionality
```