LTE Standard
Error Code List

LTE Standard Module Series

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About the Document

History

Revision	Date	Author	Description
1.0	2019-11-29	Yosef ZHANG	Initial

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1 Introduction

The document list the **<locationID>** and **<cause>** values when executing **AT+CEER** on Quectel LTE standard modules.

The document is applicable to following LTE Standard modules.

- EC2x: EC25, EC21, EC20 R2.0 and EC20 R2.1
- EG2x-G: EG25-G and EG21-G
- EG9x: EG91 and EG95
- EM05

2 Description of AT Commands

2.1. AT+CEER   Extended Error Report

AT+ CEER Extended Error Report	
Test Command **AT+CEER=?**	Response **OK**
Execution Command **AT+CEER**	Response **+CEER: <locationID>,<cause>** **OK** **ERROR**
Validity	/

Parameter

<locationID>	Integer type, error type ID.
<cause>	Integer type, the cause of the last failed operation.

NOTE

<locationID> and **<cause>** value listed in *Table 1* and *Table 2*.

Example

```
AT+CEER=?
OK

AT+CEER
+CEER: 0,-1

OK
```

Table 1: List of Location ID List

Location ID	Meaning
0	CS internal cause
1	CS network cause
2	CS network reject
3	PS internal cause
4	PS network cause
5	PS LTE cause
6	PS LTE local cause

Table 2: List of Cause

CS Internal Cause	Meaning
-1	No cause information available (default)
0	Phone is offline
21	No service available
25	Network release, no reason given
27	Received incoming call
29	Client ended call
34	UIM not present
35	Access attempt already in progress
36	Access failure, unknown source
38	Concur service not supported by network
39	No response received from network
45	GPS call ended for user call
46	SMS call ended for user call

47	Data call ended for emergency call
48	Rejected during redirect or handoff
100	Lower-layer ended call
101	Call origination request failed
102	Client rejected incoming call
103	Client rejected setup indication
104	Network ended call
105	No funds available
106	No service available
108	Full service not available
109	Maximum packet calls exceeded
301	Video connection lost
302	Video call setup failure
303	Video protocol closed after setup
304	Video protocol setup failure
305	Internal error
CS Network Cause	**Meaning**
1	Unassigned/unallocated number
3	No route to destination
6	Channel unacceptable
8	Operator determined barring
16	Normal call clearing
17	User busy
18	No user responding
19	User alerting, no answer

21	Call rejected
22	Number changed
26	Non selected user clearing
27	Destination out of order
28	Invalid/incomplete number
29	Facility rejected
30	Response to status enquiry
31	Normal, unspecified
34	No circuit/channel available
38	Network out of order
41	Temporary failure
42	Switching equipment congestion
43	Access information discarded
44	Requested circuit/channel not available
47	Resources unavailable, unspecified
49	Quality of service unavailable
50	Requested facility not subscribed
55	Incoming calls barred within the CUG
57	Bearer capability not authorized
58	Bearer capability not available
63	Service/option not available
65	Bearer service not implemented
68	ACM >= ACM max
69	Requested facility not implemented
70	Only RDI bearer is available

79	Service/option not implemented
81	Invalid transaction identifier value
87	User not member of CUG
88	Incompatible destination
91	Invalid transit network selection
95	Semantically incorrect message
96	Invalid mandatory information
97	Message non-existent/not implemented
98	Message type not compatible with state
99	IE non-existent/not implemented
100	Conditional IE error
101	Message not compatible with state
102	Recovery on timer expiry
111	Protocol error, unspecified
127	Interworking, unspecified
CS Network Reject	**Meaning**
2	IMSI unknown in HLR
3	Illegal MS
4	IMSI unknown in VLR
5	IMEI not accepted
6	Illegal ME
7	GPRS services not allowed
8	GPRS and non GPRS services not allowed
9	MS identity cannot be derived
10	Implicitly detached

11	PLMN not allowed
12	Location area not allowed
13	Roaming not allowed
14	GPRS services not allowed in PLMN
15	No suitable cells in location area
16	MSC temporary not reachable
17	Network failure
20	MAC failure
21	Synch failure
22	Congestion
23	GSM authentication unacceptable
32	Service option not supported
33	Requested service option not subscribed
34	Service option temporary out of order
38	Call cannot be identified
40	No PDP context activated
95	Semantically incorrect message
96	Invalid mandatory information
97	Message type non-existent
98	Message type not compatible with state
99	Information element non-existent
101	Message not compatible with state
161	RR release indication
162	RR random access failure
163	RRC release indication

164	RRC close session indication
165	RRC open session failure
166	Low level failure
167	Low level failure no redial allowed
168	Invalid SIM
169	No service
170	Timer T3230 expired
171	No cell available
172	Wrong state
173	Access class blocked
174	Abort message received
175	Other cause
176	Timer T303 expired
177	No resources
178	Release pending
179	Invalid user data
PS Internet Cause	**Meaning**
0	Invalid connection identifier
1	Invalid NSAPI
2	Invalid primary NSAPI
7	PDP establish timeout
3	Invalid field
4	SNDCP failure
5	RAB setup failure
6	No GPRS context

8	PDP activate timeout
9	PDP modify timeout
10	PDP inactive max timeout
11	PDP lower layer error
12	PDP duplicate
13	Access technology change
14	PDP unknown reason
PS Network Cause	**Meaning**
25	LLC or SNDCP failure
26	Insufficient resources
27	Missing or unknown APN
28	Unknown PDP address or PDP type
29	User authentication failed
30	Activation rejected by GGSN
31	Activation rejected, unspecified
32	Service option not supported
33	Requested service option not subscribed
34	Service option temporary out of order
35	NSAPI already used (not sent)
36	Regular deactivation
37	QoS not accepted
38	Network failure
39	Reactivation required
40	Feature not supported
41	Semantic error in the TFT operation

42	Syntactical error in the TFT operation
43	Unknown PDP context
44	PDP context without TFT already activated
45	Semantic errors in packet filter
46	Syntactical errors in packet filter
81	Invalid transaction identifier
95	Semantically incorrect message
96	Invalid mandatory information
97	Message non-existent/not implemented
98	Message type not compatible with state
99	IE non-existent/not implemented
100	Conditional IE error
101	Message not compatible with state
111	Protocol error, unspecified
PS LTE Cause	**Meaning**
8	Operator determined barring
26	Insufficient Resources
27	Missing or unknown APN
28	Unknown PDP address or PDP type
29	User Aauthentication faile
30	Activation rejected by Servicing GW or PDN GW
31	Activation rejected, unspecified
32	Service option not supported
33	Requested service option not subscribed
34	Service option temporarily out of order

35	PTI already In use
36	Regular deactivation
37	QoS not accepted
38	Network failure
39	Reactivation required
40	Feature not supported
41	Semantic error in the TFT operation
42	Syntactical error in the TFT operation
43	Unknown Bearer context
44	Semantic errors in packet filter
45	Syntactical errors in packet filter
46	Bearer Context without TFT already Active
47	PTI mismatch
49	PDN disconnected ,Not allowed
50	PDN type IPV4 only Allowed
51	PDN type IPV6 only Allowed
52	Single ADR bearers only Allowed
53	ESM info not recieved
54	PDN connection does not exist
55	Multiple PDN connection for given APN not allowed
56	Collision with network init request
59	Unsupported QCI value
81	Invalid PTI value
95	Symantically invalid message
96	Invalid mandatory information

97	Message non-existent/not implemented
98	Message type not compatible with state
99	Info Elemant non existent
100	Conditional IE error
101	Message type not compatible with state
111	Protocol error, unspecified
112	APN restrict value incompatible with ACT context
PS LTE Local Cause	**Meaning**
3	Illegal UE
6	Illegal ME
7	EPS services not allowed
9	UE id can't be driven by network
10	Implicitly Detached
11	PLMN not allowed
12	tracking area not allowed
13	Roaming not allowed in this tracking area
15	No Suitable cells in tracking area
18	CS Domain Not available
25	Not Authorized for this CSG
38	CS fallback call EST not allowed
39	CS domain temperarly not allowed
43	Unknown EPS bearer context
256	Released AT RRC
257	Signal Connection Released
258	EMM detached

259	EMM attach failed
260	EMM attach started
261	NAS service request failed
262	ESM activate dedicated bearer reactivater by network
263	Lower layer failure
264	Lower layer failure
265	Network activater dedicated bearer with ID of deffered bearer
266	BAD OTA message
267	DS rejected the call
268	Context transferred due to IRAT
269	DS explicit deactivation
270	ESM MSGR failure
271	Local Cause not Available
272	Rejected due to connected state
273	Nas Service request failed ,no throttle
274	ACL failure
275	Nas Service request failed , DS disallow
276	EMM T3417 expired
277	EMM T3417 ext expired
278	Nas LRRC UL data CNF failure TXN
279	Nas LRRC UL data CNF failure HO
280	Nas LRRC UL data CNF failure Conn release
281	Nas LRRC UL data CNF failure RLF
282	Nas LRRC UL data CNF failure control Not CONN
283	NAS LRRC connection EST success

284	NAS LRRC connection EST failure
285	NAS LRRC connection EST failure, aborted
286	NAS LRRC connection EST failure, access barrer
287	NAS LRRC connection EST failure, CELL resel
288	NAS LRRC connection EST failure, config failure
289	NAS LRRC connection EST failure, timer expired
290	NAS LRRC connection EST failure, link failure
291	NAS LRRC connection EST failure, not camped
292	NAS LRRC connection EST failure, SI failure
293	NAS LRRC connection EST failure, CONN reject
294	NAS LRRC connection release normal
295	NAS LRRC connection release RLF
296	NAS LRRC connection release CRE failure
297	NAS LRRC connection release QOS during CRE
298	NAS LRRC connection release aborted
299	NAS LRRC connection release SIB read error
300	NAS LRRC connection release aborted IRAT Success
301	Nas Reject LRRC radio link failure
302	Nas service request failure, LTE network reject
303	Nas detach with reattach, LTE network detach
304	NAS detach without reacttach, LTE network detach