



# Device Test Report

Device Test System Revision : 3.1.1.12 Build: 2022-7-25 Test ID:752925113



Vendor : Banner Engineering Corporation

Device Name : Q20KAF400Q7

Vendor ID : 0x01C3

Device ID : 0x070006

IO-Link Version : V1.1.2

Product ID : Q20KAF400Q7

ISDU supported : True

SIO mode supported : True

Process Data Input Bits : 8

Process Data Output Bits : 0

Min Cycle Time : 2300  $\mu$ s

Bitrate : COM2

Implemented Access Locks :

parameter="True" datastorage="True" localParameterization="True" localUserInterface="True"

IODD : Banner\_Engineering-Q20\_EAF-20231101-IODD1.1.xml

Checker : IODD-Checker V1.1.4

CRC : 1406245211

Firmware Revision : 1.0

Hardware Revision : not known

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Test result : All test were passed with positiv result in complete operation

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Test operated by :

Company : Banner EngineeringName : Jim CheasickSignature : Jim Cheasick

**Testreport : Test Configuration**

Test variable for 8 Bit index access :

Index : 244

Length: 1

Data (hex) : 00

Test variable for 16 Bit index access :

Index : 16368

Length: 1

Data (hex) : 01

Test variable for 8 Bit index extended length :

Index : 243

Length: 16

Data (hex) : 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20

Implemented system commands :

1 2 3 4 5 6 130 65 79 160 161 162 163

M-sequence Capability (hex) :

01

Commands to generate events :

Index : 16376

Event trigger 1 : appear value = 0

disappear value = 1

Event trigger 2 : appear value = 2

disappear value = 3

===== Config Messages from Testcases =====

The testcase is skipped because the device is not capable to change a parameter via local user interface

**Testreport Overview (1)**

TC_Device_Identification	ok
Data Layer Tests V3.1.1.12	
SDCI_TC_0034 TCD_DLPC_STUP_CYCTIME	ok
SDCI_TC_0035 TCD_DLPC_STUP_STUOPER1	ok
SDCI_TC_0306 TCD_DLPC_CHK_OVERRIDOK	ok
SDCI_TC_0036 TCD_DLPC_STUP_STUOPER2	ok
SDCI_TC_0037 TCD_DLPC_OPER_OPERSTUP1	ok
SDCI_TC_0038 TCD_DLPC_STAR_OPERSTAR2	ok
SDCI_TC_0039 TCD_DLPC_PREO_READDPP1	ok
SDCI_TC_0040 TCD_DLPC_PREO_WRITEDPP1	ok
SDCI_TC_0041 TCD_DLPC_PROP_SHORT_FRAME	ok
SDCI_TC_0043 TCD_DLPC_PROP_SIMRESET	ok
SDCI_TC_0044 TCD_DLPC_PROP_FRAMEFAULT	ok
SDCI_TC_0045 TCD_DLPC_OPER_READ	ok
SDCI_TC_0046 TCD_DLPC_OPER_WRITE	ok
SDCI_TC_0047 TCD_DLPC_OPER_NEGWRITE	ok
SDCI_TC_0049 TCD_DLPC_OPER_SIMRESET	ok
ISDU Tests V3.1.1.12	
SDCI_TC_0052 TCD_DLPC_ISDU_AVAILFSEQCAP	ok
SDCI_TC_0053 TCD_DLIC_ISDU_IDLEBUSYCHECK	ok
SDCI_TC_0054 TCD_DLIC_ISDU_READINDEX8	ok
SDCI_TC_0055 TCD_DLIC_ISDU_READ8EXTLENGTH	ok
SDCI_TC_0056 TCD_DLIC_ISDU_WRITE8	ok
SDCI_TC_0057 TCD_DLIC_ISDU_READ8RESERVED	ok
SDCI_TC_0058 TCD_DLIC_ISDU_READ8NOSUBINDEX	ok
SDCI_TC_0059 TCD_DLIC_ISDU_READ16	ok
SDCI_TC_0060 TCD_DLIC_ISDU_WRITE16	ok
SDCI_TC_0061 TCD_DLIC_ISDU_READ16RESERVED	ok
SDCI_TC_0062 TCD_DLIC_ISDU_READ16NOSUBINDEX	ok
SDCI_TC_0063 TCD_DLIC_ISDU_WRITE8LENOVERRUN	ok
SDCI_TC_0064 TCD_DLIC_ISDU_WRITE8WRONGLEN	ok
SDCI_TC_0065 TCD_DLIC_ISDU_WRITE8WRONGCHECKSUM	ok
SDCI_TC_0066 TCD_DLIC_ISDU_WRITE8ROINDEX	ok
SDCI_TC_0067 TCD_DLIC_ISDU_ABORTREADREQ	ok
SDCI_TC_0068 TCD_DLIC_ISDU_ABORTREADRESP	ok
Event Tests V3.1.1.12	
SDCI_TC_0069 TCD_DLIC_EVNT_OPERSINGLEEVENT	ok
SDCI_TC_0070 TCD_DLIC_EVNT_PROPSINGLEEVENT	ok
SDCI_TC_0071 TCD_DLIC_EVNT_OPEREVENTCLEAR	ok
SDCI_TC_0072 TCD_DLIC_EVNT_OPERCOMMINTERRUPT	ok
SDCI_TC_0073 TCD_DLIC_EVNT_OPERPOWERINTERRUPT	ok
SDCI_TC_0074 TCD_DLIC_EVNT_OPERAPPEARDISAPPEAR	ok

**Testreport Overview (2)**

SDCI_TC_0075 TCD_DLIC_EVNT_OPERMULTEVENT	ok
SDCI_TC_0076 TCD_DLIC_EVNT_OPERSHORTEVENT	ok
Data Storage Tests V3.1.1.12	
SDCI_TC_0077 TCD_APPS_DSUP_NOFLAG	ok
SDCI_TC_0078 TCD_APPS_DSUP_VIADOWNLOADSTORE	ok
SDCI_TC_0079 TCD_APPS_DSUP_VIADOWNLOADSTORENOWRITE	ok
SDCI_TC_0080 TCD_APPS_DSUP_VIALOCHCHANGE	ok
SDCI_TC_0081 TCD_APPS_DSUP_PARABREAKABORT	ok
SDCI_TC_0082 TCD_APPS_DSDN_PARAMODIFICATION	ok
SDCI_TC_0083 TCD_APPS_DSDN_FACTORYRESET	ok
SDCI_TC_0084 TCD_APPS_DSDN_PARABREAKABORT	ok
Legacy Master Tests V3.1.1.12	
SDCI_TC_0085 TCD_DLIC_COMP_STARTUP	ok
SDCI_TC_0086 TCD_DLIC_COMP_TYPE1INTERLEAVE	ok
SDCI_TC_0087 TCD_DLIC_COMP_PDINVALIDEVENT	ok
Direct Parameter Page 1 Tests V3.1.1.12	
SDCI_TC_0089 TCD_DLPC_STDP_MASTERCYCLETIME	ok
SDCI_TC_0090 TCD_DLPC_STDP_MINCYCLETIME	ok
SDCI_TC_0091 TCD_DLPC_STDP_FSEQCAPABILITY	ok
SDCI_TC_0092 TCD_DLPC_STDP_REVISIONID	ok
SDCI_TC_0093 TCD_DLPC_STDP_PDIN	ok
SDCI_TC_0094 TCD_DLPC_STDP_PDOUT	ok
SDCI_TC_0095 TCD_DLPC_STDP_VENDORID	ok
SDCI_TC_0096 TCD_DLPC_STDP_DEVICEID	ok
SDCI_TC_0097 TCD_DLPC_STDP_FUNCTIONID	ok
SDCI_TC_0100 TCD_DLPC_STDP_READRESPAR	ok
SDCI_TC_0101 TCD_DLPC_STDP_WRITERESPAR	ok
Predefined Device Parameter Tests V3.1.1.12	
SDCI_TC_0104 TCD_DLIC_DEFP_SYSCMDRES	ok
SDCI_TC_0107 TCD_DLIC_DEFP_DSINDEX	ok
SDCI_TC_0108 TCD_DLIC_DEFP_DSRECORD	ok
SDCI_TC_0109 TCD_DLIC_DEFP_ACCESSLOCKSVAL	ok
SDCI_TC_0110 TCD_DLIC_DEFP_ACCESSLOCKSINVAL	ok
SDCI_TC_0111 TCD_DLIC_DEFP_PROFILCHARAC	ok
SDCI_TC_0112 TCD_DLIC_DEFP_PDINDESC	ok
SDCI_TC_0113 TCD_DLIC_DEFP_PDOUTDESC	ok
SDCI_TC_0114 TCD_DLIC_DEFP_VENDORNAM	ok
SDCI_TC_0115 TCD_DLIC_DEFP_VENDORTXT	ok
SDCI_TC_0116 TCD_DLIC_DEFP_PRODUCTNAM	ok
SDCI_TC_0117 TCD_DLIC_DEFP_PRODUCTID	ok
SDCI_TC_0118 TCD_DLIC_DEFP_PRODUCTTXT	ok
SDCI_TC_0119 TCD_DLIC_DEFP_SERNUM	ok

**Testreport Overview (3)**

SDCI_TC_0120 TCD_DLIC_DEFP_HARDREV	ok
SDCI_TC_0121 TCD_DLIC_DEFP_FIRMREV	ok
SDCI_TC_0122 TCD_DLIC_DEFP_TAGVALID	ok
SDCI_TC_0123 TCD_DLIC_DEFP_TAGINVALID	ok
SDCI_TC_0124 TCD_DLIC_DEFP_ERRCOUNT	ok
SDCI_TC_0128 TCD_DLIC_DEFP_DEVSTAT	ok
SDCI_TC_0129 TCD_DLIC_DEFP_DETAILDEVSTAT	ok
SDCI_TC_0130 TCD_DLIC_DEFP_DETAILDEVSTATINACTIVE	ok
SDCI_TC_0131 TCD_DLIC_DEFP_DETAILDEVSTATACTIVE	ok
SDCI_TC_0132 TCD_DLIC_DEFP_PDIN	ok
SDCI_TC_0133 TCD_DLIC_DEFP_PDOUT	ok
SDCI_TC_0134 TCD_DLIC_DEFP_OFFTIMEVALID	ok
SDCI_TC_0136 TCD_DLIC_DEFP_PROFILEPARREAD	ok
SDCI_TC_0137 TCD_DLIC_DEFP_PROFILEPARWRITE	ok
SDCI_TC_0140 TCD_DLIC_DEFP_WRITETOREADONLY	ok
SDCI_TC_0141 TCD_DLIC_DEFP_WRITETOOSHORT	ok
SDCI_TC_0142 TCD_DLIC_DEFP_WRITETOOLONG	ok

**Block Parameter Tests V3.1.1.12**

SDCI_TC_0143 TCD_DSBP_APPL_BPDOWNLOAD	ok
SDCI_TC_0144 TCD_DSBP_APPL_BPBREAKCMD	ok
SDCI_TC_0145 TCD_DSBP_APPL_BPBREAKRESET	ok
SDCI_TC_0147 TCD_DSBP_APPL_BPBREAK2DOWNLOADS	ok
SDCI_TC_0148 TCD_DSBP_APPL_BPBREAKLOCALLOCK	ok

**IODD based Tests V3.1.1.12**

SDCI_TC_0149 TCD_IODD_PARV_IDENT	ok
SDCI_TC_0150 TCD_IODD_PARV_COMPFILE	ok
SDCI_TC_0151 TCD_IODD_PARV_READVERIFY	ok
SDCI_TC_0152 TCD_IODD_PARV_WRITEVERIFY	ok
SDCI_TC_0157 TCD_IODD_PARV_INDEXCONSISTENT	ok
SDCI_TC_0156 TCD_IODD_PARV_ACCESSLOCK	ok
SDCI_TC_0155 TCD_IODD_PARV_FACTORYSETTINGS	ok

**support of Physical Layer Tests V3.1.1.12**

SDCI_TC_priv WAKEUP_PULSE_DETECTION	ok
SDCI_TC_0304 TCD_PHYL_INTF_UARTTRANSDELAY	ok
SDCI_TC_0305 TCD_PHYL_INTF_RESPONSETIME	ok

## Testreport Overview (4)

### Test Report Statistics:

Number of test cases overall : 109  
Number of test cases ok : 109  
Number of test cases failed : 0  
Number of test cases skipped : 0  
Test Operation : complete