



# Device Test Report

Device Test System Revision : 3.1.1.10 Build: 2021-4-26 Test ID:673605508



Vendor : Banner Engineering Corporation

Device Name : Q5XKLAF5000-Q8

Vendor ID : 0x01C3

Device ID : 0x090002

IO-Link Version : 1.1

Product ID : Q5XKLAF5000-Q8

ISDU supported : True

SIO mode supported : True

Process Data Input Bits : 32

Process Data Output Bits : 8

Min Cycle Time : 3600 µs

Bitrate : COM2

Implemented Access Locks :

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

IODD : Banner\_Engineering-Q5XKLAF5000-20210303-IODD1.1.xml

Checker : IODD-Checker V1.1.4

CRC : 2421873897

Firmware Revision : 3.0.0

Hardware Revision : 3.0

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

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Test operated by :

Company : \_\_\_\_\_

Name : \_\_\_\_\_

**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 67 68 71 72 79 162 16  
3

M-sequence Capability (hex) :

09

Commands to generate events :

Index : 16376

Event trigger 1 : appear value = 0

disappear value = 1

Event trigger 2 : appear value = 2

disappear value = 3

**Testreport Overview (1)**

|                                                |    |
|------------------------------------------------|----|
| TC_Device_Identification                       | ok |
| Data Layer Tests V3.1.1.10                     |    |
| SDCI_TC_0034 TCD_DLPC_STUP_CYCTIME             | ok |
| SDCI_TC_0035 TCD_DLPC_STUP_STUOPER1            | ok |
| SDCI_TC_0306 TCD_DLPC_CHCK_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 V3.1.1.10                           |    |
| 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 V3.1.1.10                          |    |
| 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 V3.1.1.10                       |    |
| 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_VIALOCALCHANGE          | 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 V3.1.1.10                      |    |
| 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 V3.1.1.10            |    |
| 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 V3.1.1.10        |    |
| 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_VENDORTEXT              | ok |
| SDCI_TC_0116 TCD_DLIC_DEFP_PRODUCTNAM              | ok |
| SDCI_TC_0117 TCD_DLIC_DEFP_PRODUCTID               | ok |
| SDCI_TC_0118 TCD_DLIC_DEFP_PRODUCTTEXT             | 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 V3.1.1.10                  |    |
| 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 |
| IODE based Tests V3.1.1.10                       |    |
| SDCI_TC_0149 TCD_IODE_PARV_IDENT                 | ok |
| SDCI_TC_0150 TCD_IODE_PARV_COMPFILE              | ok |
| SDCI_TC_0151 TCD_IODE_PARV_READVERIFY            | ok |
| SDCI_TC_0152 TCD_IODE_PARV_WRITEVERIFY           | ok |
| SDCI_TC_0157 TCD_IODE_PARV_INDEXCONSISTENT       | ok |
| SDCI_TC_0156 TCD_IODE_PARV_ACCESSLOCK            | ok |
| SDCI_TC_0155 TCD_IODE_PARV_FACTORYSETTINGS       | ok |
| support of Physical Layer Tests V3.1.1.10        |    |
| 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