

Device Test Report



IPF ELECTRONIC



Vendor: IPF ELECTRONIC GmbH

Vendor ID: 0x030C

Device Name: FR900020

Device ID: 0x5AA001

Product ID: FR900020

Hardware rev: HW-V 001

Firmware rev: FW-V 2.8.0

Serial Number: 0000000000

IO-Link Version: 1.1

Bitrate: COM2

Min Cycle Time: 3400 μ s

Implemented Access Locks:

Parameter, Data storage

Implemented System Commands:

1, 2, 3, 4, 5, 6, 128, 130

Process Data Input Bits: 32

Process Data Output Bits: 0

M-sequence capability: 0x2B

SIO supported: yes

ISDU supported: yes

Data storage: yes

Block parameters: yes

IODD: IPF-FR900020-20230803-IODD1.1.xml

Checker: IODD-Checker V1.1.4

CRC: 3309515482

Windows application version: 1.2.1.1

Hardware version: HW: 002, FW: 036

Tester ID: -

Test cases file: Protocol_test_cases_V112.xml

Test cases version: 1.1.2

Referring to package: 2015

Test completed by:

Test Result:

All included test cases have been passed.

Company: _____

Name: _____

Signature: _____

Testreport configuration (1)**Config1:**

Index: 0x00FD

Data: 0xAA

Config2:

Index: 0x3FFE

Data: 0x0F

Config3:

Index: 0x0018

Data: 0xA1 0xA2 0xA3 0xA4 0xA5 0xA6 0xA7 0xA8 0x09 0xAA 0xAB 0xAC 0xAD 0xAE

Config4:Data: 0x40 0x41 0x42 0x43 0x44 0x45 0x46 0x47 0x48 0x49 0x4A 0x4B 0x65 0x66 0x68 0x6C 0x6D 0x6E 0x6F 0x70
0x7C 0x8C 0x8D 0x8E 0x8F 0x90 0x91 0x92**Config5:**

Index: 0x0040

Data: 0x00

Config6:

Index: 0x0040

Data: 0x41 0x41

Config7:

Event trigger index: 0x00FC

Event A appear value: 0

Event A disappear value: 1

Event B appear value: 2

Event B disappear value: 3

Comments:

The Device supports the 16 bit ISDU indices.

The Device doesn't support the Local parametrization feature.

(SDCI_TC_0080 had been skipped)

The Device is able to generate events (by an ISDU parameter or by the Tester).

The Device is able to generate PD invalid event (by the Tester).

Testreport Overview (1)

SDCI_TC_0034 TCD_DLPC_STUP_CYCTIME	passed
SDCI_TC_0035 TCD_DLPC_STUP_STUPOPER1	not applicable
SDCI_TC_0306 TCD_DLPC_CJCK_OVERRIDOK	not applicable
SDCI_TC_0036 TCD_DLPC_STUP_STUPOPER2	passed
SDCI_TC_0037 TCD_DLPC_OPER_OPERSTUP1	passed
SDCI_TC_0038 TCD_DLPC_OPER_OPERSTAR2	passed
SDCI_TC_0039 TCD_DLPC_PROP_READDPP1	passed
SDCI_TC_0292 TCD_DLPC_PROP_READDPPEP	not applicable
SDCI_TC_0040 TCD_DLPC_PROP_WRITEDPP1	passed
SDCI_TC_0041 TCD_DLPC_PROP_SHORTMESSAGE	passed
SDCI_TC_0042 TCD_DLPC_PROP_WRITECOLL	not applicable
SDCI_TC_0043 TCD_DLCP_PROP_SIMRESET	passed
SDCI_TC_0044 TCD_DLCP_PROP_FRAMEFAULT	passed
SDCI_TC_0045 TCD_DLPC_OPER_READ	passed
SDCI_TC_0046 TCD_DLPC_OPER_WRITE	passed
SDCI_TC_0047 TCD_DLPC_OPER_NEGWRITE	passed
SDCI_TC_0048 TCD_DLPC_OPER_WRITECOLL	not applicable
SDCI_TC_0049 TCD_DLPC_OPER_SIMRESET	passed
SDCI_TC_0051 TCD_DLPC_OPER_WRONGFRAMETYPE	not applicable
SDCI_TC_0052 TCD_DLPC_ISDU_AVAILFSEQCAP	passed
SDCI_TC_0053 TCD_DLIC_ISDU_IDLEBUSYCHECK	passed
SDCI_TC_0054 TCD_DLIC_ISDU_READINDEX8	passed
SDCI_TC_0055 TCD_DLIC_ISDU_READ8EXTLENGTH	passed
SDCI_TC_0056 TCD_DLIC_ISDU_WRITE8	passed
SDCI_TC_0057 TCD_DLIC_ISDU_READ8RESERVED	passed
SDCI_TC_0058 TCD_DLIC_ISDU_READ8NOSUBINDEX	passed
SDCI_TC_0059 TCD_DLIC_ISDU_READ16	passed
SDCI_TC_0060 TCD_DLIC_ISDU_WRITE16	passed
SDCI_TC_0061 TCD_DLIC_ISDU_READ16RESERVED	passed
SDCI_TC_0062 TCD_DLIC_ISDU_READ16NOSUBINDEX	passed
SDCI_TC_0063 TCD_DLIC_ISDU_WRITE8LENOVERRUN	passed
SDCI_TC_0064 TCD_DLIC_ISDU_WRITE8WRONGLEN	passed
SDCI_TC_0065 TCD_DLIC_ISDU_WRITE8WRONGCHECKSUM	passed
SDCI_TC_0066 TCD_DLIC_ISDU_WRITE8ROINDEX	passed
SDCI_TC_0067 TCD_DLIC_ISDU_ABORTREADREQ	passed
SDCI_TC_0068 TCD_DLIC_ISDU_ABORTREADRESP	passed
SDCI_TC_0069 TCD_DLIC_EVNT_OPERSINGLEEVENT	passed
SDCI_TC_0070 TCD_DLIC_EVNT_PROPSINGLEEVENT	passed
SDCI_TC_0071 TCD_DLIC_EVNT_OPEREVENTCLEAR	passed
SDCI_TC_0072 TCD_DLIC_EVNT_OPERCOMMINTERRUPT	passed

Testreport Overview (2)

SDCI_TC_0073 TCD_DLIC_EVNT_OPERPOWERINTERRUPT	passed
SDCI_TC_0074 TCD_DLIC_EVNT_OPERAPPEARDISAPPEAR	passed
SDCI_TC_0075 TCD_DLIC_EVNT_OPERMULTEVENT	passed
SDCI_TC_0076 TCD_DLIC_EVNT_OPERSHORTEVENT	passed
SDCI_TC_0077 TCD_APPS_DSUP_NOFLAG	passed
SDCI_TC_0078 TCD_APPS_DSUP_VIADOWNLOADSTORE	passed
SDCI_TC_0079 TCD_APPS_DSUP_VIADOWNLOADSTORENOWRITE	passed
SDCI_TC_0080 TCD_APPS_DSUP_VIALOCALCHANGE	not applicable
SDCI_TC_0081 TCD_APPS_DSUP_PARABREAKABORT	passed
SDCI_TC_0082 TCD_APPS_DSDN_PARAMODIFICATION	passed
SDCI_TC_0083 TCD_APPS_DSDN_FACTORYRESET	passed
SDCI_TC_0084 TCD_APPS_DSDN_PARABREAKABORT	passed
SDCI_TC_0085 TCD_DLIC_COMP_STARTUP	not applicable
SDCI_TC_0086 TCD_DLIC_COMP_TYPEIINTERLEAVE	not applicable
SDCI_TC_0087 TCD_DLIC_COMP_PDINVALIDEVENT	not applicable
SDCI_TC_0089 TCD_DLPC_STDP_MASTERCYCLETIME	passed
SDCI_TC_0090 TCD_DLPC_STDP_MINCYCLETIME	passed
SDCI_TC_0091 TCD_DLPC_STDP_FSEQCAPABILITY	passed
SDCI_TC_0092 TCD_DLPC_STDP_REVISIONID	passed
SDCI_TC_0093 TCD_DLPC_STDP_PDIN	passed
SDCI_TC_0094 TCD_DLPC_STDP_PDOUT	passed
SDCI_TC_0095 TCD_DLPC_STDP_VENDORID	passed
SDCI_TC_0096 TCD_DLPC_STDP_DEVICEID	passed
SDCI_TC_0097 TCD_DLPC_STDP_FUNCTIONID	passed
SDCI_TC_0100 TCD_DLPC_STDP_READRESPAR	passed
SDCI_TC_0101 TCD_DLPC_STDP_WRITERESPAR	passed
SDCI_TC_0104 TCD_DLIC_DEFP_SYSCMDRES	passed
SDCI_TC_0105 TCD_DLIC_DEFP_SYSCMDIMP	not applicable
SDCI_TC_0107 TCD_DLIC_DEFP_DSINDEX	passed
SDCI_TC_0108 TCD_DLIC_DEFP_DSRECORD	passed
SDCI_TC_0109 TCD_DLIC_DEFP_ACCESSLOCKSVAL	passed
SDCI_TC_0110 TCD_DLIC_DEFP_ACCESSLOCKSINVAL	passed
SDCI_TC_0111 TCD_DLIC_DEFP_PROFILCHARAC	passed
SDCI_TC_0112 TCD_DLIC_DEFP_PDINDESC	passed
SDCI_TC_0113 TCD_DLIC_DEFP_PDOUTDESC	not applicable
SDCI_TC_0114 TCD_DLIC_DEFP_VENDORNAM	passed
SDCI_TC_0115 TCD_DLIC_DEFP_VENDORTEXT	passed
SDCI_TC_0116 TCD_DLIC_DEFP_PRODUCTNAM	passed
SDCI_TC_0117 TCD_DLIC_DEFP_PRODUCTID	passed
SDCI_TC_0118 TCD_DLIC_DEFP_PRODUCTTEXT	passed

Testreport Overview (3)

SDCI_TC_0119 TCD_DLIC_DEFP_SERNUM	passed
SDCI_TC_0120 TCD_DLIC_DEFP_HARDREV	passed
SDCI_TC_0121 TCD_DLIC_DEFP_FIRMREV	passed
SDCI_TC_0122 TCD_DLIC_DEFP_TAGVALID	passed
SDCI_TC_0123 TCD_DLIC_DEFP_TAGINVALID	passed
SDCI_TC_0124 TCD_DLIC_DEFP_ERRCOUNT	not applicable
SDCI_TC_0128 TCD_DLIC_DEFP_DEVSTAT	passed
SDCI_TC_0129 TCD_DLIC_DEFP_DETAILDEVSTAT	passed
SDCI_TC_0130 TCD_DLIC_DEFP_DETAILDEVSTATINACTIVE	passed
SDCI_TC_0131 TCD_DLIC_DEFP_DETAILDEVSTATACTIVE	passed
SDCI_TC_0132 TCD_DLIC_DEFP_PDIN	passed
SDCI_TC_0133 TCD_DLIC_DEFP_PDOUT	not applicable
SDCI_TC_0134 TCD_DLIC_DEFP_OFFTIMEVALID	not applicable
SDCI_TC_0135 TCD_DLIC_DEFP_OFFTIMEINVALID	not applicable
SDCI_TC_0136 TCD_DLIC_DEFP_PROFILEPARREAD	passed
SDCI_TC_0137 TCD_DLIC_DEFP_PROFILEPARWRITE	passed
SDCI_TC_0140 TCD_DLIC_DEFP_WRITETOREADONLY	passed
SDCI_TC_0141 TCD_DLIC_DEFP_WRITETOOSHORT	passed
SDCI_TC_0142 TCD_DLIC_DEFP_WRITETOOLONG	passed
SDCI_TC_0143 TCD_DSBP_APPL_BPDOWNLOAD	passed
SDCI_TC_0144 TCD_DSBP_APPL_BPBREAKCMD	passed
SDCI_TC_0145 TCD_DSBP_APPL_BPBREAKRESET	passed
SDCI_TC_0147 TCD_DSBP_APPL_BPBREAK2DOWNLOADS	passed
SDCI_TC_0148 TCD_DSBP_APPL_BPBREAKLOCALLOCK	not applicable
SDCI_TC_0149 TCD_IODD_PARV_IDENT	passed
SDCI_TC_0150 TCD_IODD_PARV_COMPROFILE	passed
SDCI_TC_0151 TCD_IODD_PARV_READVERIFY	passed
SDCI_TC_0152 TCD_IODD_PARV_WRITEVERIFY	passed
SDCI_TC_0155 TCD_IODD_PARV_FACTORYSETTINGS	passed
SDCI_TC_0156 TCD_IODD_PARV_ACCESSLOCK	passed
SDCI_TC_0157 TCD_IODD_PARV_INDEXCONSISTENT	passed

Testreport Summary (1)

Number of overall test cases: 111

Number of not applicable test cases: 17

Number of not run test cases: 0

Number of all passed test cases: 94

Number of passed test cases with warning: 0

Number of failed test cases: 0

Testreport Details (1)**SDCI_TC_0035 TCD_DLPC_STUP_STUOPER1****skipped**

Test: SDCI_TC_0035

Set Deviceinitial state

Wake up device: Success

Start up device: Success

Initial state is set. Device is ready for the test.

1. step - SDCI_TC_0035: Check the backward compatibility feature.

Saved data can't be used.

× Backward compatibility feature isn't supported.

√ Test is skipped.

Device has gone to the initial state. [Devicestate: E_DEVICESTATE_SIO]

SDCI_TC_0306 TCD_DLPC_CJCK_OVERRIDOK**skipped**

Test: SDCI_TC_0306

Set Deviceinitial state

Wake up device: Success

Initial state is set. Device is ready for the test.

1. step - SDCI_TC_0306: Check the backward compatibility feature.

Saved data can't be used.

× Backward compatibility feature isn't supported.

√ Test is skipped.

SDCI_TC_0292 TCD_DLPC_PROP_READDPPEP**not included****SDCI_TC_0042 TCD_DLPC_PROP_WRITECOLL****not included****SDCI_TC_0048 TCD_DLPC_OPER_WRITECOLL****not included****SDCI_TC_0051 TCD_DLPC_OPER_WRONGFRAMETYPE****not included****SDCI_TC_0080 TCD_APPS_DSUP_VIALocalCHANGE****skipped**

Test: SDCI_TC_0080

Testreport Details (2)

Set Deviceinitial state

Wake up device: Success

Start up device: Success

PreOperate: Success

Operate: Success

Initial state is set. Device is ready for the test.

1. step - SDCI_TC_0080: Test initialization. (Issue DS_UploadStart command to reset the DS_UPLOAD_FLAG if it is set)

Parameters:

Index: 0x0003

Sub-index: 0x01

Data: □(0x01)

Datalength: 1 byte(s)

Answer:

Servicecode: 5

(positive response for write request)

Checksum: 0x52

Framecount: 2

ISDU length: 2 byte(s)

Error code: 0x00

Additional error: 0x00

(No error)

✓ Positive response.

2. step - SDCI_TC_0080: Test initialization. (Issue DS_UploadEnd command to reset the DS_UPLOAD_FLAG if it is set)

Parameters:

Index: 0x0003

Sub-index: 0x01

Data: □(0x02)

Datalength: 1 byte(s)

Answer:

Testreport Details (3)

Servicecode: 5
(positive response for write request)
Checksum: 0x52
Framecount: 2
ISDU length: 2 byte(s)
Error code: 0x00
Additional error: 0x00
(No error)

✓ Positive response.

3. step - SDCI_TC_0080: Test initialization. (Write 0xFF to Event status code to acknowledge the possible ongoing event)

Answer:
Event flag: clear

✓ Positive response.

4. step - SDCI_TC_0080: Check local parametrization supportion.

× Local parametrization isn't supported.

✓ Test is skipped.

Device has gone to the initial state. [Devicestate: E_DEVICESTATE_SIO]

SDCI_TC_0085 TCD_DLIC_COMP_STARTUP**skipped**

Test: SDCI_TC_0085

Set Deviceinitial state

Wake up device: Success

Initial state is set. Device is ready for the test.

1. step - SDCI_TC_0085: Check the backward compatibility feature.

Saved data can't be used.

× Backward compatibility feature isn't supported.

✓ Test is skipped.

Testreport Details (4)**SDCI_TC_0086 TCD_DLIC_COMP_TYPE1INTERLEAVE****skipped**

Test: SDCI_TC_0086

Set Deviceinitial state

Initial state is set. Device is ready for the test.

1. step - SDCI_TC_0086: Check the backward compatibility feature.

Saved data can't be used.

× Backward compatibility feature isn't supported.

√ Test is skipped.

SDCI_TC_0087 TCD_DLIC_COMP_PDINVALIDEVENT**skipped**

Test: SDCI_TC_0087

Set Deviceinitial state

Initial state is set. Device is ready for the test.

1. step - SDCI_TC_0087: Check the backward compatibility feature.

Saved data can't be used.

× Backward compatibility feature isn't supported.

√ Test is skipped.

SDCI_TC_0105 TCD_DLIC_DEFP_SYSCMDIMP**not included****SDCI_TC_0113 TCD_DLIC_DEFP_PDOUTDESC****skipped**

Test: SDCI_TC_0113

Set Deviceinitial state

Wake up device: Success

Start up device: Success

PreOperate: Success

Operate: Success

Initial state is set. Device is ready for the test.

1. step - SDCI_TC_0113: Check PD Output Descriptor implementation.

× PD Output Descriptor isn't implemented.

√ Test is skipped.

Device has gone to the initial state. [Devicestate: E_DEVICESTATE_SIO]

Testreport Details (5)**SDCI_TC_0124 TCD_DLIC_DEFP_ERRCOUNT****skipped**

Test: SDCI_TC_0124

Set Deviceinitial state

Wake up device: Success

Start up device: Success

PreOperate: Success

Operate: Success

Initial state is set. Device is ready for the test.

1. step - SDCI_TC_0124: Check Error count implementation.

× Error count isn't implemented.

√ Test is skipped.

Device has gone to the initial state. [Devicestate: E_DEVICESTATE_SIO]

SDCI_TC_0133 TCD_DLIC_DEFP_PDOUT**skipped**

Test: SDCI_TC_0133

Set Deviceinitial state

Wake up device: Success

Start up device: Success

PreOperate: Success

Operate: Success

Initial state is set. Device is ready for the test.

1. step - SDCI_TC_0133: Check Process Data Output implementation.

× Process Data Output isn't implemented.

√ Test is skipped.

Device has gone to the initial state. [Devicestate: E_DEVICESTATE_SIO]

SDCI_TC_0134 TCD_DLIC_DEFP_OFFTIMEVALID**skipped**

Test: SDCI_TC_0134

Set Deviceinitial state

Testreport Details (6)

Wake up device: Success

Start up device: Success

PreOperate: Success

Operate: Success

Initial state is set. Device is ready for the test.

1. step - SDCI_TC_0134: Offset Time implementation.

× Offset Time isn't implemented.

√ Test is skipped.

Device has gone to the initial state. [Devicestate: E_DEVICESTATE_SIO]

SDCI_TC_0135 TCD_DLIC_DEFP_OFFTIMEINVALID**skipped**

Test: SDCI_TC_0135

Set Deviceinitial state

Wake up device: Success

Start up device: Success

PreOperate: Success

Operate: Success

Initial state is set. Device is ready for the test.

1. step - SDCI_TC_0135: Check Offset Time implementation.

× Offset Time isn't implemented.

√ Test is skipped.

Device has gone to the initial state. [Devicestate: E_DEVICESTATE_SIO]

SDCI_TC_0148 TCD_DSBP_APPL_BPBREAKLOCALLOCK**skipped**

Test: SDCI_TC_0148

Set Deviceinitial state

Wake up device: Success

Start up device: Success

PreOperate: Success

Operate: Success

Initial state is set. Device is ready for the test.

Testreport Details (7)

1. step - SDCI_TC_0148: Check local parametrization supportion.

× Local parametrization isn't supported.

√ Test is skipped.

Device has gone to the initial state. [Devicestate: E_DEVICESTATE_SIO]