



COMPLIANCE PROGRAM TEST REPORT

USB 2.0 Test Report For Full Speed Peripheral

Company Name: Identive GmBH

VID (Dec or Hex): 1254 The VID for the company who applies the USB-IF logo.

Model Name: Identive CLOUD 2700 F

Product Type: USB smart card reader

Report Date: 2013/03/12

Test Result: **PASS**

Tester: Shef Hsieh

Authorized Signature: Howard Chang



Legal Disclaimer

1. TEST RESULT IS VALID ONLY TO THE ORIGINAL TESTED DEVICE MODEL. ALLION RESERVES THE RIGHT TO PROHIBIT OTHERS TO DISTORT, ISOLATE, FALSIFY, COPIED AND/OR BY ANY PROCESS TO CHANGE THE CONTENT OF THIS TEST REPORT UNLESS IT IS PRIOR APPROVED BY ALLION.



Legacy USB Compliance Tests

Frameworks Test Result (USB20CV): ☒ Pass ☐ Fail

This test primarily covers USB-IF testing of devices and hubs for compliance with the standard commands in Chapters 9 and 11 of the USB 2.0 specification. This specification does not describe the full set of USB-IF tests and assertions for these devices.

VID: 04e6

PID: 5710

Chapter 9: ☒ Pass ☐ Fail

Interface: 1 MAX Power: 90 mA

Remote Wakeup: Yes

MSC: ☐ Pass ☐ Fail ☒ N/A

UVC: ☐ Pass ☐ Fail ☒ N/A

HID: ☐ Pass ☐ Fail ☒ N/A

Frameworks Test Result (USB30CV): ☒ Pass ☐ Fail

All USB peripherals are required to enumerate on a SuperSpeed host controller and pass all applicable tests within USB30CV. Failure framework test in USB30CV will prevent certification

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Power Current Test Result: ☒ Pass ☐ Fail

Power Type: Low Powered Device

Operating Power: 21.92 mA

(≤ Max Power ≤ 100mA for Low Power)

(≤ Max Power ≤ 100mA for Self Power)

(≤ Max Power ≤ 500mA for High Power)

Unconfiguration Power: 9.98 mA

(≤ 100mA)

Configuration Power: 9.93 mA

(≤ Max Power ≤ 100mA for Low Power)

(≤ Max Power ≤ 500mA for High Power)

Suspend Mode Power: N/A uA

(Remote Wakeup Unsupported Device Only)

(Remote Wakeup Supported Device=> Type "N/A")

(≤ 2500uA for Self Power Hub or Non Compound Device)

(≤ 12500uA for Bus Power Hub or Compound Device)

Suspend Mode Power with Remote Wakeup: 836 uA

Suspend Mode Power without Remote Wakeup: 758 uA

(Remote Wakeup Supported Device Only)

(Remote Wakeup Unsupported Device => Type "N/A")

(≤ 2500uA for Self Power Hub or Non Compound Device)

(≤ 12500uA for Bus Power Hub or Compound Device)

Powered' State Suspend Mode Power: 830 uA

(≤ 2500uA for not Supporting USB Battery Charging)

(≤ 100mA for Supporting USB Battery Charging)



Interoperability Test Overall Result: ☒ Pass

☐ Fail OS: Win 7

EHCI Host Controller:

Enumeration and Driver installation

☒ Pass ☐ Fail

Check operation of device

☒ Pass ☐ Fail

Interoperability – Operate all devices

☒ Pass ☐ Fail

Hot plug test – A Plug

☒ Pass ☐ Fail

Hot plug test – B Plug

☐ Pass ☐ Fail ☒ N/A

Warm Boot test

☒ Pass ☐ Fail

Remote Wake-up Test

☒ Pass ☐ Fail ☐ N/A

S3 Active Standby Test

☒ Pass ☐ Fail

S3 Active Standby Resume Test

☒ Pass ☐ Fail

Root Port Test

☒ Pass ☐ Fail

S4 Active Hibernate Test

☒ Pass ☐ Fail

S4 Active Hibernate Resume Test

☒ Pass ☐ Fail

UHCI Host Controller:

Interoperability – Operate all devices

☒ Pass ☐ Fail

System Suspend/Resume Test– Operate DUT

☒ Pass ☐ Fail

Warm Boot Test – Operate DUT

☒ Pass ☐ Fail

OHCI Host Controller:

Interoperability – Operate all devices

☒ Pass ☐ Fail

System Suspend/Resume Test – Operate DUT

☒ Pass ☐ Fail

Warm Boot Test – Operate DUT

☒ Pass ☐ Fail



USB Compliance Program Test Report



Full Speed Signal Quality Test Result: ☒ Pass ☐ Fail

Connector Type: Tethered (Tethered means no standard B or special B connector)

Full Speed Upstream Signal Quality: ☒ Pass ☐ Fail

Inrush Current Test: ☒ Pass ☐ Fail

Back Voltage Test Result: (Enumerate before/after) ☒ Pass ☐ Fail

D+: 0 mV / 0 mV

D- : 0 mV / 0 mV

V_{Bus}: 0 mV / 0 mV

(All values <= 400mV)

Miscellaneous: ☒ Pass ☐ Fail

Bypass Capacitance Check: ☒ Pass ☐ Fail

BC 1.2 Implemented Check: ☐ Support ☒ Not Support



More Detail Test Result:

1. Full Speed Upstream Signal Quality: Pass

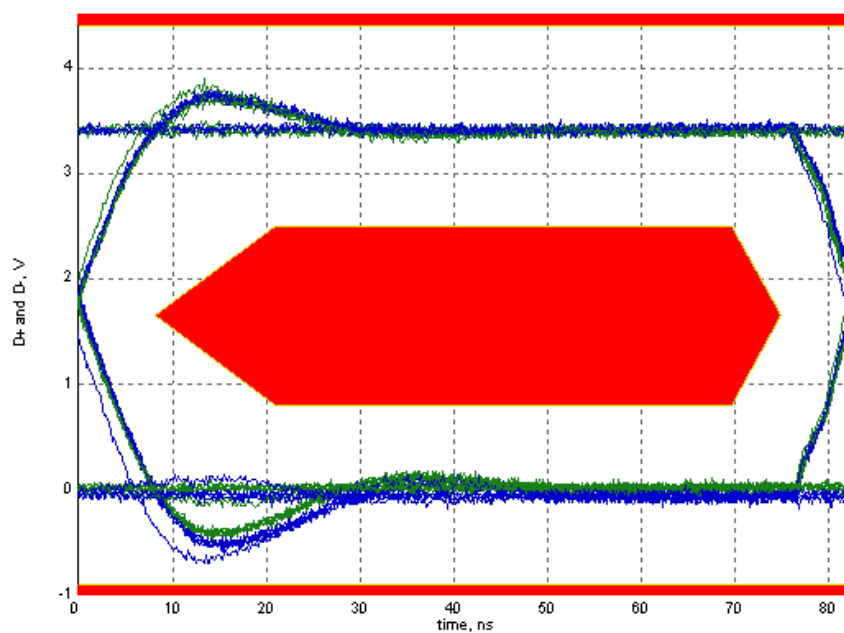
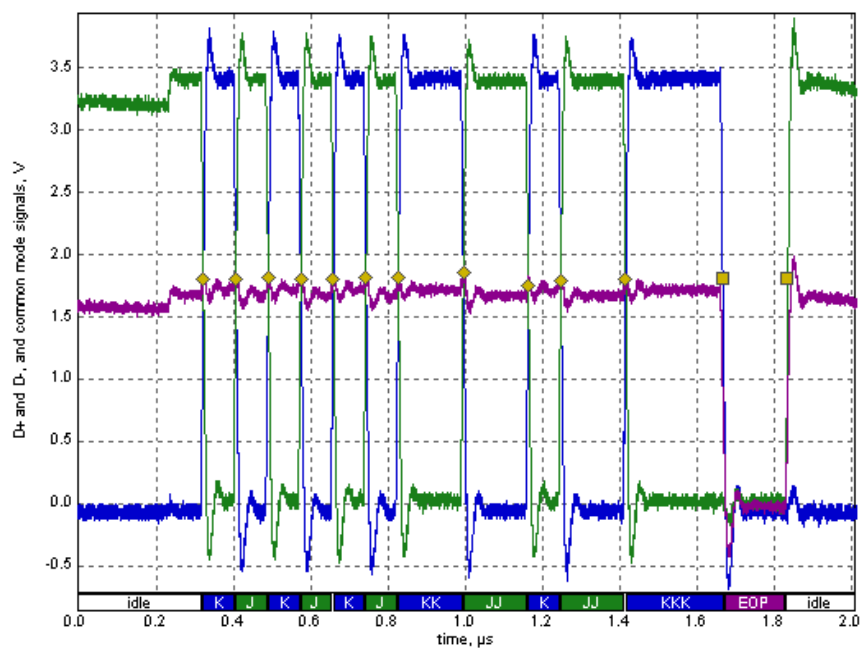
- Overall result: pass!
- Sync result:
sync passes
- Signal eye:
eye passes
- EOP width: 167.39 ns
EOP width passes
- Measured signaling rate: 11.9951 MHz
signal rate passes
- Edge Monotonicity: 72 mV
Monotonic Edge passes
- Crossover voltage range: 1.75 V to 1.85 V, mean crossover 1.81 V
(first crossover at 1.80 V, 10 other differential crossovers checked)
crossover voltages pass
- Consecutive jitter range: -164.406 ps to 154.025 ps, RMS jitter 126.013 ps
- Paired JK jitter range: -50.888 ps to 78.774 ps, RMS jitter 66.313 ps
- Paired KJ jitter range: -28.487 ps to 33.943 ps, RMS jitter 23.672 ps
jitter passes

Additional Information

- Rising Edge Rate: 281.69 V/us (Equivalent risetime = 9.37 ns)
(minimum 132.00 V/us, maximum 660.00 V/us)
- Falling Edge Rate: 253.53 V/us (Equivalent falltime = 10.41 ns)
(minimum 132.00 V/us, maximum 660.00 V/us)
- Edge Rate Match: 10.53% (limit +/-10%)



SignalData and Eye

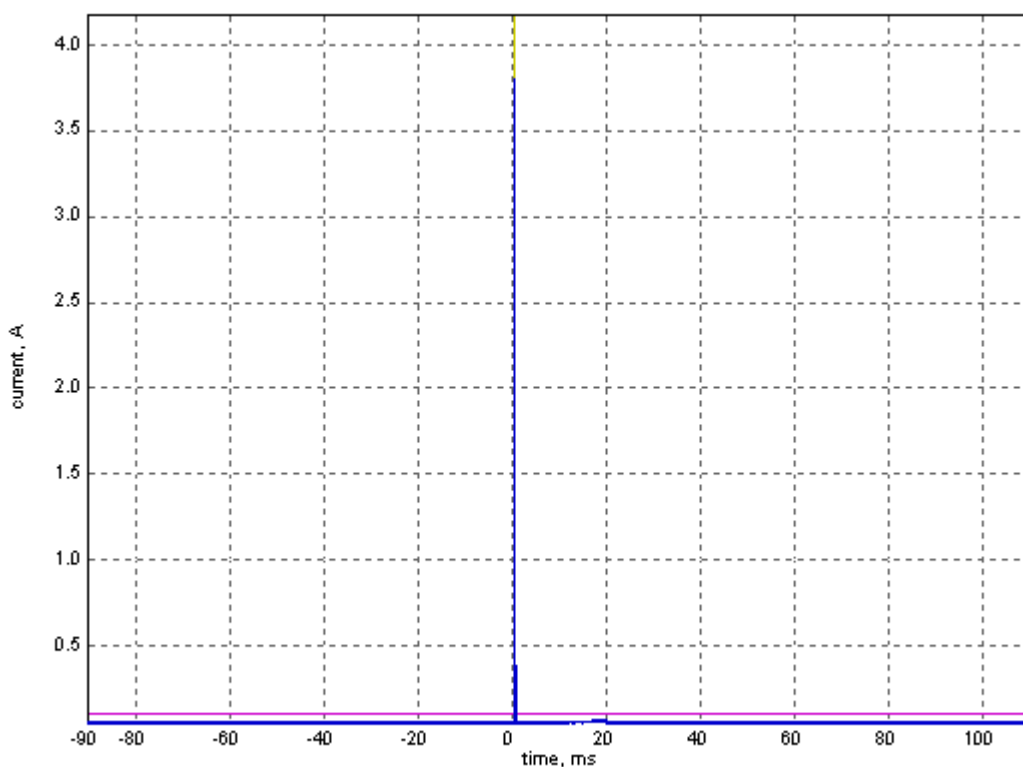




2. Inrush Current: Pass

- Overall result: pass!
- Inrush at 5.000 V: 36.2617 μ C
Inrush passes
- Region 1 Start: 0.00112 ms - End: 0.181 ms = 36.26 μ C

Hot Plug (Attach) Current Draw





Notice: Test result is valid only to the original tested device model. The content of test report may not be copied or re-transmitted (except for the entire report) unless it is prior approved by Allion.

Test Procedure Reference:

1. USB-IF Compliance Update Page---Interoperability Gold Tree Update
<http://compliance.usb.org/resources/GoldSuite%20Test%20Procedure.pdf>
2. Universal Serial Bus Implementers Forum Full and Low Speed Electrical and Interoperability Compliance Test Procedure, version: 1.3