

Integrators' List (IL) Policy

An Integrators' List (IL) is published by the IBTA following each IBTA officially sponsored Plugfest. The IL began with the June 2003 Plugfest. This list includes devices from IBTA member companies that were tested during the Plugfest and comply with the conditions as listed below. By virtue of its listing on the IL, an IBTA Member Company may publish information identifying its device(s) as having complied with these conditions.

All test results are the individual property of the Plugfest participants and will not be disclosed in any form by the IBTA. See the specific Plugfest NDA document for terms and conditions governing disclosure of test results by individual participants.

Disclaimer - This IBTA Integrators' List (IL) is provided "AS IS" and without any warranty of any kind, including, without limitation, any express or implied warranty of non-infringement, merchantability or fitness for a particular purpose. In no event shall IBTA or any member of IBTA be liable for any direct, indirect, special, exemplary, punitive, or consequential damages, including, without limitation, lost profits, even if advised of the possibility of such damages.

General Conditions

1. A device must be tested and pass the requisite tests (according to the conditions stated in the Tests and Testing Criteria section below) in order to be included on the IL.
2. Additionally, a vendor may elect to have a device tested for optional InfiniBand™ capabilities. Supporting documentation will be provided in advance of the testing period listing tests and outlining pass/fail criteria.
3. Each published IL will include at least the following information for each vendor device (Component Type)
 - a. All, except Passive Devices:
 - i. Product Description
 - ii. Model number
 - iii. Component Type, either:
 - 1) Host Channel Adapter (HCA)
 - 2) Target Channel Adapter (TCA)
 - 3) Switch
 - 4) Integrated System (refer to the Definitions section)
 - 5) Router
 - iv. Hardware version
 - v. Software version
 - vi. Additional Capabilities [Optional] (e.g., SM/SA, IPoIB, Atomic, etc.)
 - b. Passive Devices (Cables/Optics)
 - i. Part Number
 - ii. Width
 - iii. Length (meters)
 - iv. AWG
 - v. Equalized
 - vi. Connector Manufacturer
 - vii. Paddle Card Manufacturer
 - viii. Bulk Wire Manufacturer
 - ix. Wire Part Number
4. Each device will be listed on the IL only as tested.
5. Each published IL will have a link to a document that clearly describes the testing, and actual tests, that have been performed for each Component Type.
6. The IL will be made available to the general public.

Tests and Testing Criteria for the IL

1. CIWG will publish an approved list of IL and Additional Capabilities tests for each Plugfest. This list and all final approved test implementations for a particular Plugfest will be made available to CIWG members a minimum of 45 days prior to the Plugfest.
2. The Component Type will be tested only as it is registered.
3. Testing for IL Listing - Each Component Type must pass the conditions of both a. and b. below to be listed on the IL:
 - a. Compliance – A Component Type must pass 100% of the IL compliance tests listed on the approved test list for the Plugfest. This compliance testing may be conducted by the vendor or during the Plugfest as determined by the CIWG.
 - b. Interoperability
 - i. Each device (Component Type) must pass all IL compliance tests as stated in 3.a above.
 - ii. Additionally, each device (Component Type), as registered, must comply with the following conditions for interoperability:
 - 1) Must be tested with a minimum of five (5) other DUTs (called a “Partnering DUT” for the sake of this paragraph).
 - 2) Must pass 80% of all mandatory gradable items (as determined by CIWG) to be considered ‘interoperable’ with a Partnering DUT.
 - 3) Must be ‘interoperable’ (as described in 3.b.ii.2_with 80% of the Partnering DUTs selected in part 3.b.ii.1 above.
 - iii. Selection of the Partnering DUTs identified in part 3.b.ii.1 above is based on the best effort to be random and to test dissimilar devices against each other. Selection is to be made by an impartial third-party.
 - iv. If any of the Partnering DUTs are determined to be non-compliant (i.e. failed part 3.a above) during the course of the Plugfest event, the interoperability results of this Partnering DUT will not be used; the interoperability results of the remaining compliant Partner DUTs will be used to determine the interoperability IL status of the DUT. The CIWG Co-Chairs will resolve any disputes arising from the status of a Partnering DUT and the interoperability IL status of devices.
 - v. In the event there are insufficient Partnering DUTs, testing will still be conducted. If these DUTs pass the requisite Interoperability procedures with available DUTs, the Co-Chairs of the CIWG will need to make the final determination if these DUTs would be IL listed.

4. Testing for Additional Capabilities

- a. To list an Additional Capability for a device on the IL, the Component Type must successfully complete the list of tests specifically identified for the additional capability, as specified in published testing documents.
- b. Failure to pass certain additional capability tests (e.g., Atomic) will affect listing on the IL. A list of these capabilities will be provided in the supporting documentation.

5. Cable Compliance and Interoperability

- a. Cables must pass 100% of the IL Physical Layer Cable Compliance tests.
- b. Interoperability - To be listed on the IL, a cable must be used between at least two different pairs of End Points which successfully pass this test.
- c. Reference Cables – Each Cable Vendor may select specific cables to be used as reference cables to be IL Certified and placed on the IL. All cables of less length than the reference cable will be assumed to be IL Certified and listed on the IL if the following conditions are met:
 - i. Cable length permutations down to 1m lengths are permitted from a common fully compliant reference cable.
 - ii. The only variable allowed from the reference cable is conductor length (must be shorter than the certified reference cable).
 - 1) Any other changes to the cable connector, paddleboard or equalization systems, or wire gauge will constitute a material change requiring full re-certification of a cable.
 - 2) A specification sheet must be provided for each cable to document conformance with conditions 1 – 3 above.

6. Contesting Test Results

- a. IBTA institutes, if required, a review board for a period of 30 days after the Plugfest to deal with objections and review issues. Test accuracy and vendor specific claims can both be investigated.
- b. Vendors have 30 days after they receive the results of their tests to contest the results.
- c. If a vendor wants to contest the result of a test, the vendor must prove that a defect in the *test* or *test process* caused the device to fail that test. Traces, log files and, if applicable, waveforms must be submitted.
- d. Resolution of the contest allows redemption and possible listing on the IL.

- e. If a defect is found in the *test* or the *test definition*, the particular test is nullified. The IL will then be adjusted accordingly.
- f. Any contests received after 30 days are recorded as non-critical.
- g. The review board is chaired by the CIWG Co-chairs and consists of members from CIWG subgroups, test implementers, and/or IBTA architecture working groups. Final decisions are made by the CIWG Co-chairs based on the findings from the review board.
- h. If the vendor chooses to contest the results and is not successful in the contest, there will be an Appeal Fee charged which will consist of a minimum of \$1,000 which would cover 10 hours of vendor testing. Additional time spent in the appeal process will be billed at a rate of \$100 per hour. IBTA reserves the right to change the billing rate at any time.

7. Notice Period

- a. Vendors who have failed a Compliance Test or an Interoperability Procedure will be notified within 7 days of the conclusion of the Plugfest.
 - i. Notification will also go out to any vendor whose IL results might be affected by the appeal of other vendors.
 - ii. Notification will include all supporting materials such as traces and log files.
- b. A vendor who wishes to contest a result must notify the CIWG in writing of its intent to contest within 14 days after the conclusion of the Plugfest.
- c. All contests must be resolved within five weeks after the conclusion of the Plugfest.
 - i. This gives the vendor a full 30 days after being notified by Test Vendor.
 - ii. It is the vendor's responsibility to present their case in detail and in sufficient time for the CIWG Co-Chairs to complete the review in 30 days.

Displaying the IL

1. All current and archived lists will be accessible from the IBTA IL web page (<http://www.infinibandta.org/itinfo/IL>). A list is current if it meets the criteria below. Otherwise, the list is placed with the Archives.
2. HCAs, Switches and Integrated Systems
 - a. Current Device List – This list will reflect devices passing the tests conducted at the most recent Plugfest.
 - b. Archives – This section includes all Device Integrators' Lists that are no longer current. When the Current Device List is superseded at the conclusion of a new Plugfest, it will be placed with the other Archives.
3. Cables – The lists for Cables are time and not event dependent.
 - a. Current Cable Lists
 - i. This section will show all Cable Integrators' Lists for all cables passing tests conducted at Plugfests within the previous 12-month period. Cable listings will be separated by Plugfests.
 - ii. When the cable listing for a specified Plugfest exceeds 12 months, that listing will be moved to the Archives.
 - b. Archives – This section includes all Cable Integrators' Lists that are no longer current.

Definitions

1. Integrated System - An Integrated System is a system that includes more than one (1) IB node type (i.e. HCA, TCA, switch, or router) internally connected together, such that these ports are not externally exposed to the tester and can be connected in an arbitrary topology. Such internal connections can occur within an ASIC, on a PCB as in the case of a system or in a chassis based or blade server system.
 - a. Integrated System Internal Port - This is an IB port of an Integrated System that cannot be accessed physically.
 - b. Integrated System External Port - This is an IB port of an Integrated System that is neither an internal port nor a management port and which is physically accessible.