IEEE 1722.1 Corrigendum Feb 2014

Ashley Butterworth
Apple Inc.

Jeff Koftinoff
Meyer Sound
2 Normative Reference

- The normative reference for IIDC2 isn’t in the list (and the one in the bibliography is wrong [1.31])
6.5.2.3 Advertise Interface State Machine

- Advertising Entity State Machine and Advertising Interface State Machine both update the available_index.
  - Only the Advertising Entity State Machine should be doing it
  - Remove the entityInfo.available_index += 1 in the WAITING state

- doAdvertise needs to be set to false in both INITIALIZE and ADVERTISE

- remove setting of rcvdDiscover = FALSE in WAITING
7.2.15 INTERNAL_PORT_* Descriptors

- Table 7.26 (the INTERNAL_PORT_INPUT and INTERNAL_PORT_OUTPUT Descriptor) has incorrect description for `block_latency` field
  - EXTERNAL_PORT_* should be INTERNAL_PORT_*
7.2.10 Memory Object

- Table 7.18 needs to state memory object lengths (maximum_length and length) are in octets.

- Thanks Andy @ XMOS
7.2.17.1 Video Cluster

- Need a value for IIDC (missing)
- Need to update to changes in IEEE P1722a subtype and format definitions
7.3.1 Sampling Rates

- IIDC Frame Rates can’t be represented
  - Add Pull 5, multiply base frequency by $\frac{1}{8}$ (or divide by 8)
7.3.2.1 Stream Formats

- IIDC needs to be changed to work with IIDC2
  - Define an enum for formats (eg VGA_Mono8, VGA_RGB8Packed)

- Need to update to changes in IEEE P1722a subtype definitions
7.3.10 Video Cluster Color Space

- Need to add color spaces
  - 32 bit ARGB (8 bit Alpha, Red, Green and Blue)
  - 32 bit BGRA (8 bit Blue, Green, Red and Alpha)
  - 4:2:0 video range and full range
7.4.42 GET_COUNTERS

7.4.42.1 and 7.4.42.2

- “descriptor_type is set to either ENTITY, AVB_INTERFACE, CLOCK_SOURCE or STREAM_INPUT.”
  
  - This is incorrect as there are no counters defined for CLOCK_SOURCE, CLOCK_SOURCE should be CLOCK_DOMAIN

- “descriptor_type is set to either ENTITY, AVB_INTERFACE, CLOCK_DOMAIN or STREAM_INPUT.”
7.4.15 SET_STREAM_INFO

- Table 7.129 is out of sync with Table 8.3
  - bit 27 should be SUPPORTS_ENCRYPTED
  - bit 26 should be ENCRYPTED_PDU
  - bit 25 should be TALKER_FAILED
For CONTROL_SELECTOR_* types the number_of_values is actually the number of options. Two possible fixes:

- Change INCREMENT_CONTROL and DECREMENT_CONTROL command text to specify that index_count is number_of_values field value for CONTROL_LINEAR_* and CONTROL_ARRAY_* or it is 1 for all other types

- Deprecate CONTROL_SELECTOR_* type and replace with CONTROL_NEW_SELECTOR_* types which include a number_of_options field and then specify number_of_values correctly
7.4.42.2 GET_COUNTERS

- Table 7.137 and Table 7.140 have ENTITY_SPECIFIC_N in the wrong order
  - Symbols are in reversed order compared to other counter groups.
8.2.1.17 flags field

- Add a note or text which clarifies that the FAST_CONNECT flag is set by the Listener in the CONNECT_TX command to indicate that it is sending the CONNECT_TX command because it is restoring from saved state (Fast Connect mode) and not because it is acting in response to receiving a CONNECT_RX command.
D Memory Object Uploads

- Memory Object Upload Protocol needs to be broken into segments for devices which can’t fit whole image into RAM
  - MEMORY_OBJECT descriptor will have another field maximum_segment_length
  - UPLOAD operation will have 2 values, the length being written and the segment size being used
  - Annex D state machines will be tweaked to work in segments while attempting to maintain compatibility with a single segment download working in the same way as it does now
Your Issues Here

- Do you have any more issues?
- Please email them to Ashley and Jeff or the mailing list and I will add them