

Division 6 - Lincoln Laboratory
Massachusetts Institute of Technology
Cambridge 39, Massachusetts

SUBJECT: MINUTES - MIT - IBM CENTRAL STANDARDS COMMITTEE, AUG. 14, 1953
To: MIT-IBM Central Standards Committee
From: C. W. Watt
Date: August 19, 1953

Abstracts

The 4th Meeting of the MIT-IBM Central Standards Committee was held Friday, Aug. 14, 1953 at MIT.

IBM Representatives were N. Edwards and J. Goetz. MIT Representatives were C. Watt, K. Olsen, and W. Papian.

The following agenda was considered:

1. Consideration of Materials and Processes wiring proposal.
2. Consideration of Terms and Symbols proposal.
3. Consideration of Component Application Memos #3E, 10, and 11.
4. Consideration of Drafting proposal #1, and possibly of #2 and #3.

Order of Business:

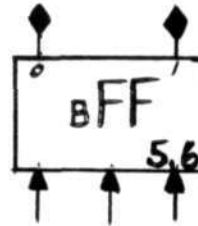
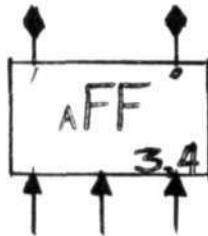
1. Drafting proposal #1 on drawing number assignment.
This was approved as is. (It should be noted here that the identifying term AN/FSQ-7 may be used on all drawings without making them classified; per memo from A. P. Kromer, to C. Watt and A. Falcione, dated Aug. 12, 1953).
2. Terms and Symbols Proposal.
This was discussed in detail.
 - a. Up to 2.24 accepted as is.
 - b. Sec. 2.25 added, to read "Detailed circuit schematics will be drawn for each type of pluggable unit."
 - c. Section 3.1:
New definitions of pulses and signal levels were adopted, and a new symbol for a "long pulse" line was included (open arrowhead).
Standard Nomenclature will be "standard pulse" (0.1 microsecond, half sine wave); "long pulse", (fixed length pulse over 0.1 ms); and "signal level" replacing "DC level" (any signal whose length is determined by the information state of the machine, as a flip flop output).

Order of Business (con't)

2. d. Section 3.3:

It was decided to indicate basic circuit types by letters rather than numbers, and to place the letter subscript before the circuit designation rather than after.

As -



Thus circuits can be called "an A flip flop" or a "C gate tube", etc.

- e. The restriction on limiting the 1 and 0 sides of the flip flop block to the left and right sides respectively, was questioned. Watt agreed to check WWI practice. The committee agreed to abide by his findings. WWI usage appears to have been ambiguous, both sides having been used, as convenient. It is recommended by R. P. Mayer that the 0 and 1 sides be on right or left, whichever makes for the simplest drawings. The standard has been so reworded.
- f. The rest of the standard was accepted as it was written. The text has been checked for use of the new terminology agreed upon above, and is being retyped for general usage.

3. Progress report from Components Committee.

This was read and accepted; and is as follows:

"DATE: 14 August 1953

SUBJECT: Progress Report on Activities, as Requested in Minutes of CSC,
7-17-53

- 1. CAM's on diodes are being reworked, as instructed by CSC and as indicated in meeting of IBM design engineers held 8-11-53. Four classes of diodes will be provided. Drafts will be prepared during ECSC meeting of 8-14-53, drafts will be circulated for comment and will be reconsidered at ECSC meeting of 8-27-53.
- 2. Tests to provide information in section 1.1 of CAM-9A will be performed by IBM Electrical Laboratory as soon as personnel are available.

Signed: _____
B. B. Paine

_____ " "
W. Rudman

4. Component Application Memo 3E
Capacitors, Rectangular can, Impregnated paper dielectric.

The draft of this CAM was approved with the following comments:

1. 1.1.1. Round off design tolerance to + 20%.
 2. 1.3 Replace "heavy transients" with "repeated transients". Eliminate "a member of", to make last sentence read in part "-----, consult with the Electronic Components Sub-Committee."
 3. 1.4.2. Change to read: "The minimum insulation resistance is 3000 meg-ohms at 25°C."
 4. 1.5. Change "must" to "shall".
 5. 1.6. Change "must never" to "shall not".
 6. 2.2. Add phrase to make this sentence read "capacitors meeting JAN-C-25 or MIL-C-25A characteristics E, in hermetically sealed cases, may be purchased from the following suppliers."
 7. 3.1.1. Eliminate "in some units".
 8. 3.2. Eliminate "in general".
 9. 3.3.1. Change "will vary with" to "will vary approximately with".
 10. In general, clean up the phraseology to clarify the meaning.
5. A proposal from the Mechanical Design Sub-Committee was distributed and discussed. This recommends the use of MIL-E-4158 spec as an interim guide in the Mechanical design of the AN/FSQ-7 system, and discusses methods of making deviations. All present were in favor, but due to fact that the proposal had not been distributed previously at IBM the chairman feels final approval should be postponed until the next meeting. Copies will be sent to IBM at once.
6. Component Application Memos #10 and #11 were not acted on due to lack of time.
7. Wiring and Soldering Proposal
This was approved with minor changes, and a reservation by the MIT members on the advisability of using IBM edge connectors at all. The chairman hereby requests the Electronic Components Sub-Committee to get test data from IBM's Electrical Lab on the reliability of this type of solderless connector and make a recommendation of the Central Committee at its next meeting on whether or not this connector should be adopted. The rest of the standard was approved and will be issued. Section 5.1 should be omitted until the recommendation from the components committee is received. Section 5 will now contain only one section on solderless lugs in general. Approval by the Components Committee will result in a CAM covering the connectors, and thus need not be specifically included in the wiring proposal.
8. It was generally felt that the MIL-E-4158 Air Force Spec should be studied by all members of the Central Standards Committee. Copies will be circulated to MIT and IBM Central Standards Committee members at once.

The next meeting will be held in Poughkeepsie on Thursday, Aug. 27, 1953.

Signed

C. W. Watt
C. W. Watt

Co-chairman-Joint IBM-MIT Standards Committee

CWW/cp

cc: Best Kromer Paine Smith
Olsen Jacobs Hodgdon Falcione Giordano
Papian Bassett Ayer Wainwright Sweetland - IBM (2 duplicate masters)