## Artwork Groundrules - 05.07.87

## XVIII. Short2's padded to 144 grids .

## Cases:

- A. Latch which goes to itself then to another latch .
- B. Latch which goes to itself then through a jumper to another latch .
- C. Latch which goes to a non latch then through a jumper then to a latch.
- D. Latch which goes through a jumper then to a non latch then to a latch .
- E. Latch which goes to a jumper then to itself (first latch) then to another latch .
- F. 1. Latch which hits a non latch which hits a latch .
  - 2. SPECIAL PADDING pad to 36 grids foil if both latches are on the same chip .

XIX. 180/120 TERMINATIONS All single ended outputs should use them .

A. S chip

DIAGRAM

B. R chip

GROUND Q

C. F chip

SIGNAL TERMINATION

## XX. PATH LENGTH CALCULATIONS

- A. FOIL DELAY

  - 1" of foil is equal to 60 grids .
    36 grids is equal to 100 picoseconds .
- B. FOIL STUB DELAY
  - 1. All stub lines are doubled .
- C. JUMPER DELAY
  - 1. A jumper is given 15 grids of path time between boards .

Example: ABC board to DEF board is 15 grids ABC board to GHI board is 30 grids DEF board to MNO board is 45 grids

NOTE: All of our present programs calculate 10 grids a jumper.