

meeting with S, R, I, people

Feb 13, '58

Demrell: "STRETCH"

2 1/2 yrs. — 2 yrs to go

(1) components:

drift transistor: 10 Megapulse ops.

{ switching
Power driver

- Speeds are actually here, — hard to push higher.

new memory: 0.5 μ s full cycle — multi-hole ferrite

- now 1000 at 0.6 μ s — better bargain.

- Transit time is limit to go to large mem.

addressing 1/2 million words.

- now 16K 2.2 μ s — toroid.

(2) planning objectives

(1) Technical & commercial use

- more effort can be put into

(2) 100 times performance (rate) a.u. float. and logical.

100 x useful work

- multiplexing -

variable field, variable record, binary, code with any no. of bits; convert from code to code by mapping.

- Data transmission

(3) I/O system would be general — not prejudicial for or against

(eg. character recognition)

any form of data.

with unit

General units simultaneously — Telephone lines

(Q: pulse shapes? will be "moderately complex" with standard matching.)

1 Serial A.U.: all logical, 20 bit/word

with unit

single format, high speed

48 bit monitor

word size in mem. 64 bits,

can cross boundaries.

(4) program interrupt system - regular

- can write prog. regardless of interrupts

Example: telephone inquiry for file in Roman disk

- levels of interruption? 1, 2, 3

- priorities

Business appl.? - of future - machine will be "in line" in real time

incomplete data must be "cleaned up" - more work

- character recognition

Philosophy of operation? : - a machine is well-loaded now,

how can person tell if he is going to get on such a machine - priority -?

can't have but one primary problem at a time others

ie. not dominated by I/O timer.

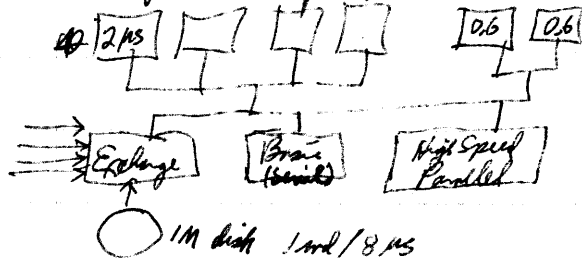
Q: Set of requirements for business machines - ^{systems study} are there a group looking into - A: "Integrated Data processing" group in research, Nature of business - tool affects the solving of problem.

Q: what business can afford it? A: ~~IBM~~ treasury ^{uses 705's} - cut costs in help for process, errors more cut

Q: components, no of.? A. will vary 100,000 transactions up.

Q: Arch speeds A. goals 0.6 Add 1.2 Mops 1.8 Div (+0.2 ops) may not meet but will come close

Q: Configuration of System:



Q: Core switching A: in part.

Q: work done here? A: yes

Q: ~~the~~ yield rates on materials? A: but would not in.

Maintenance + Reliability:

100 bits of info. from exchange

Q: Marginal checking? A: not sure it is significant.

Case: Analysis & Computation Group.

(1) ~~is~~ job shop

(2) logic minimization. — speed — boolean algebra —

(3) logic implementation;
4 level logic.