

II. COMMUNICATION REQUIREMENTS

Circuiting in 2' size

The SX 50 is equipped with two micro 68000 boards. One for the WDS and one for the SEM control. Each board has three serial communication lines and two parallel interfaces.

- The three communication lines use a serial interface adaptor MC 6850 (ACIA).
- The parallel interface uses a MC 6820 IC (PIA).

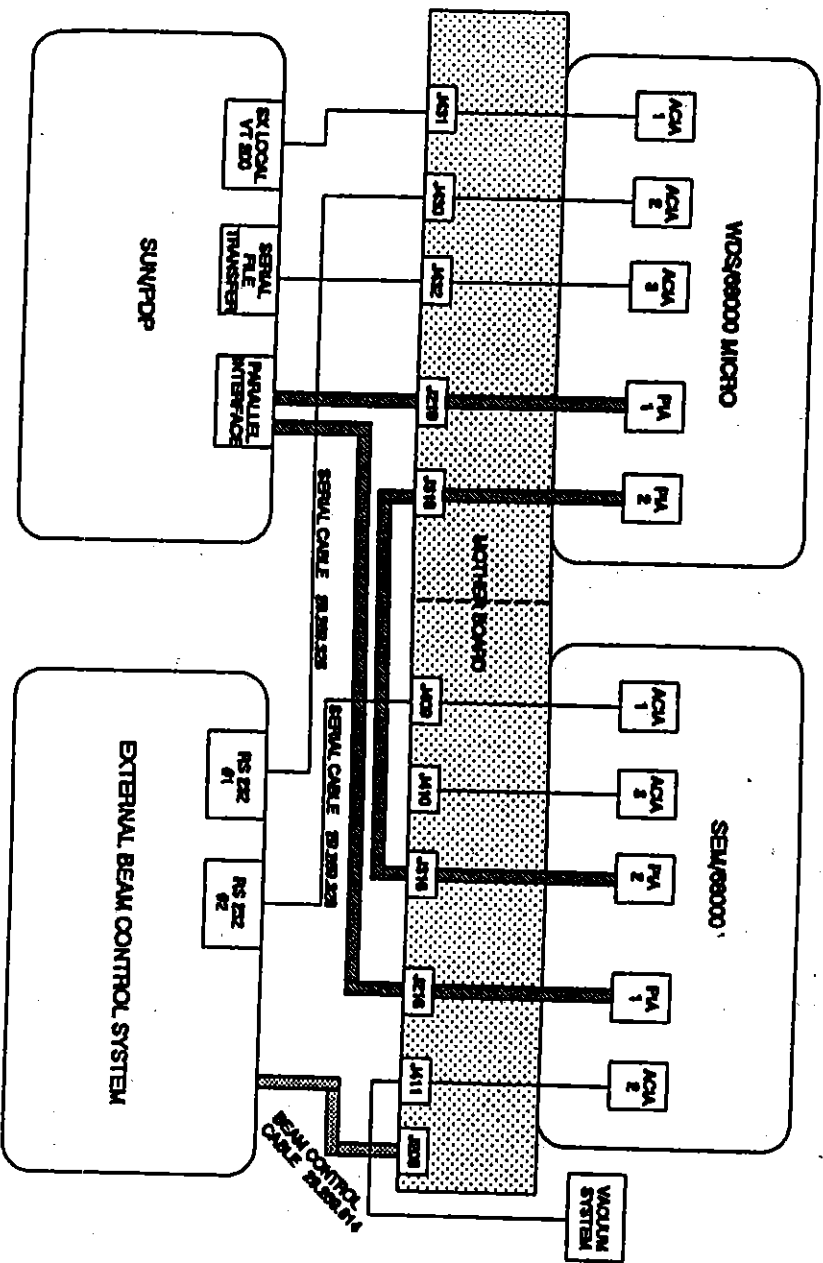
On the SEM 68000:

- ACIA-2 is reserved for vacuum control,
- PIA-2 is used for communication between the two 68000,
- PIA-1 is used to interface with a SUN/PDP computer,
- ACIA-1 and ACIA-3 are available (but ACIA-1 is normally used to interface with an external computer like Link, Tracor, Kevex or other).

On the WDS 68000:

- ACIA-1 is reserved for SX local and also used for system start-up after reset,
- ACIA-3 is reserved for file transfer between SX and SUN/PDP computer,
- ACIA-2 is available,
- PIA-2 is used in communication between the SEM 68000 micro computer,
- PIA-1 is used to interface in parallel with SUN/PDP computer.

All connections are via the mother board in the front of the instrument



System layout

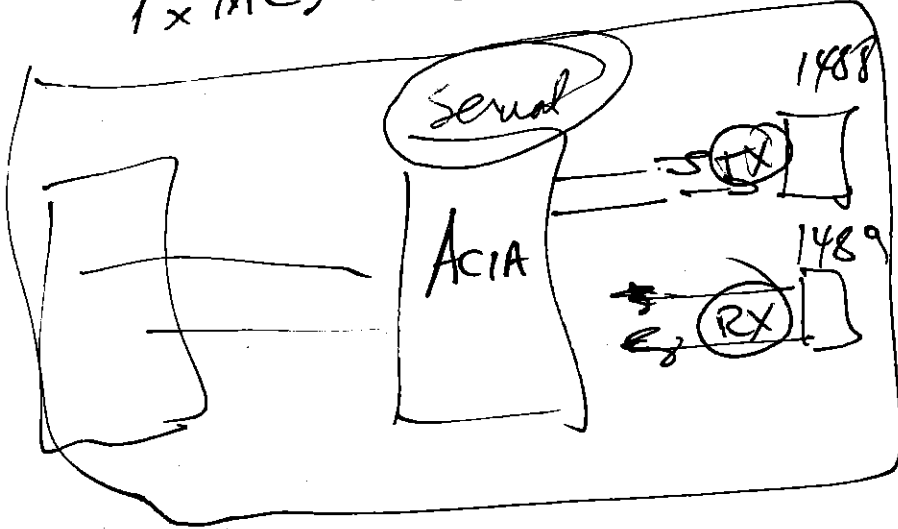
To transfer control from the SUN/PDP to external computer, the following commands must be issued:

```
SX> SP# LUN REMO ACI
SX> SP#DLUN REMO ACI2
```

1x MC 6850 → ACIA

1x MC 1488 →

1x MC 1489 ←



MC
A

