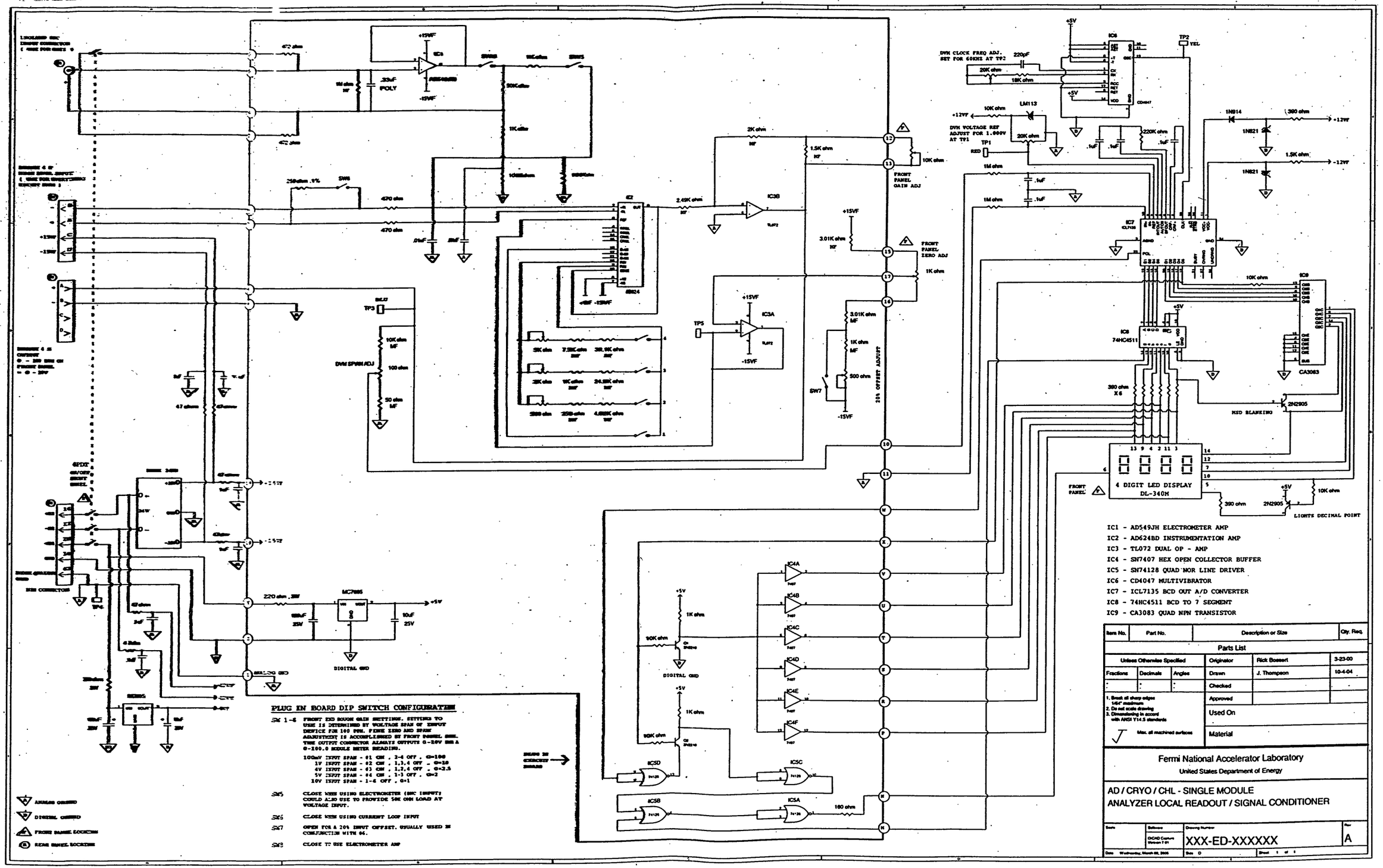
IC1 - AD549JH ELECTROMETER AMP
IC2 - AD624BD INSTRUMENTATION AMP
IC3 - TL072 DUAL OP - AMP
IC4 - SN7407 HEX OPEN COLLECTOR BUFFER
IC5 - SN74128 QUAD NOR LINE DRIVER
IC6 - CD4047 MULTIVIBRATOR
IC7 - ICL7135 BCD OUT A/D CONVERTER
IC8 - 74HC4511 BCD TO 7 SEGMENT
IC9 - CA3083 QUAD NPN TRANSISTOR
PLUG IN BOARD DIP SWITCH CONFIGURATION
SW 1-4 FRONT END ROUGH GAIN SETTINGS. SETTINGS TO USE IS DETERMINED BY VOLTAGE SPAN OF INPUT DEVICE FOR 100 PSN. FINE ZERO AND SPAN ADJUSTMENT IS ACCOMPLISHED BY FRONT PANEL ADJ. THE OUTPUT CONNECTOR ALWAYS OUTPUTS 0-10V ON A 0-100.0 DIGITAL METER READING.
100mV INPUT SPAN - 01 ON , 2-4 OFF , G=100
1V INPUT SPAN - 02 ON , 1,3,4 OFF , G=10
4V INPUT SPAN - 03 ON , 1,2,4 OFF , G=2.5
5V INPUT SPAN - 04 ON , 1-3 OFF , G=2
10V INPUT SPAN - 1-4 OFF , G=1
SW5 CLOSE WHEN USING ELECTROMETER (BNC INPUT) COULD ALSO USE TO PROVIDE 50K OHM LOAD AT VOLTAGE INPUT.
SW6 CLOSE WHEN USING CURRENT LOOP INPUT
SW7 OPEN FOR A 20% INPUT OFFSET. USUALLY USED IN CONJUNCTION WITH S6.
SW8 CLOSE TO USE ELECTROMETER AMP
ANALOG GROUND
DIGITAL GROUND
FRONT PANEL LOCKDOWN
REAR PANEL LOCKDOWN
DVM CLOCK FREQ ADJ. SET FOR 60KHZ AT TP2
DVM VOLTAGE REF ADJUST FOR 1.000V AT TP1
FRONT PANEL GAIN ADJ
FRONT PANEL ZERO ADJ
20% OFFSET ADJUST
DVM SPAN ADJ
4 DIGIT LED DISPLAY DL-340M
LIGHTS DECIMAL POINT
HSD BLANKING
DIGITAL GND
ANALOG GND
Fermi National Accelerator Laboratory
United States Department of Energy
AD / CRYO / CHL - SINGLE MODULE
ANALYZER LOCAL READOUT / SIGNAL CONDITIONER
XXX-ED-XXXXXX
A
Parts List
Unless Otherwise Specified
Fractions
Decimals
Angles
Originator
Rick Bossert
3-23-00
Drawn
J. Thompson
10-4-04
Checked
Approved
Used On
Material
Max. all machined surfaces
Item No.
Part No.
Description or Size
Qty. Req.