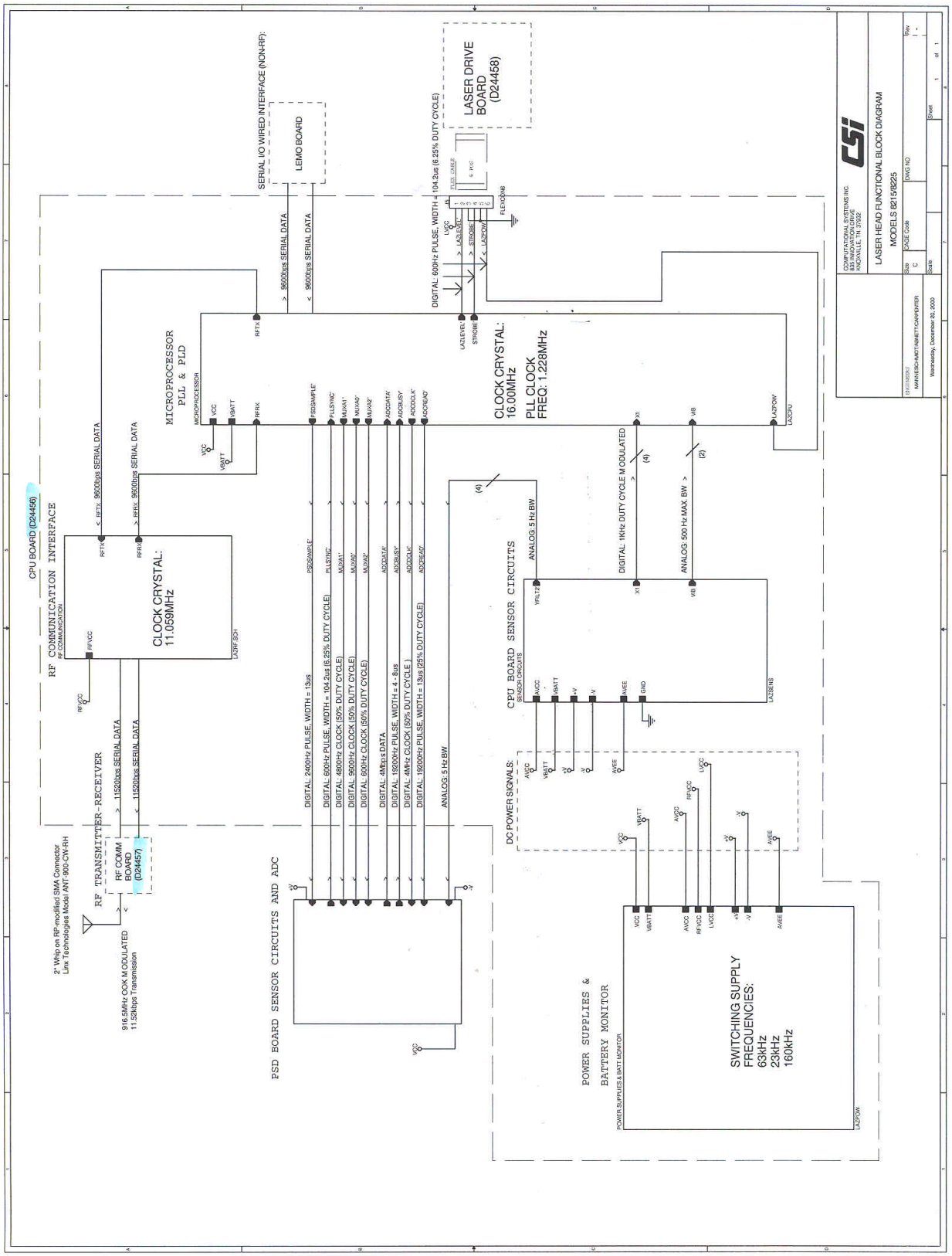
LASER HEAD FUNCTIONAL BLOCK DIAGRAM
MODELS 8215/8225
CPU BOARD (D24456)
RF COMMUNICATION INTERFACE
RF TRANSMITTER-RECEIVER
RF COMM BOARD (D24457)
2" Whip on RP-modified SMA Connector
Linx Technologies Model ANT-900-CW-RH
916.5MHz OOK MODULATED
11.52kbps Transmission
CLOCK CRYSTAL: 11.059MHz
MICROPROCESSOR PLL & PLD
CLOCK CRYSTAL: 16.00MHz
PLL CLOCK FREQ: 1.228MHz
SERIAL I/O WIRED INTERFACE (NON-RF)
LEMO BOARD
LASER DRIVE BOARD (D24458)
9600bps SERIAL DATA
11520bps SERIAL DATA
DIGITAL: 600Hz PULSE, WIDTH = 104.2us (6.25% DUTY CYCLE)
PSD BOARD SENSOR CIRCUITS AND ADC
CPU BOARD SENSOR CIRCUITS
DC POWER SIGNALS:
POWER SUPPLIES & BATTERY MONITOR
SWITCHING SUPPLY FREQUENCIES:
63kHz
23kHz
160kHz
DIGITAL: 2400Hz PULSE, WIDTH = 13us
DIGITAL: 600Hz PULSE, WIDTH = 104.2us (6.25% DUTY CYCLE)
DIGITAL: 4800Hz CLOCK (50% DUTY CYCLE)
DIGITAL: 9600Hz CLOCK (50% DUTY CYCLE)
DIGITAL: 600Hz CLOCK (50% DUTY CYCLE)
DIGITAL: 4Mbps DATA
DIGITAL: 19200Hz PULSE, WIDTH = 4 - 8us
DIGITAL: 4MHz CLOCK (50% DUTY CYCLE)
DIGITAL: 19200Hz PULSE, WIDTH = 13us (25% DUTY CYCLE)
ANALOG: 5 Hz BW
DIGITAL: 1KHz DUTY CYCLE MODULATED
ANALOG: 500 Hz MAX BW
COMPUTATIONAL SYSTEMS INC.
KNOXVILLE, TN 37932
MARKESS-MARTINNETT COMPANY
Wednesday, December 20, 2000