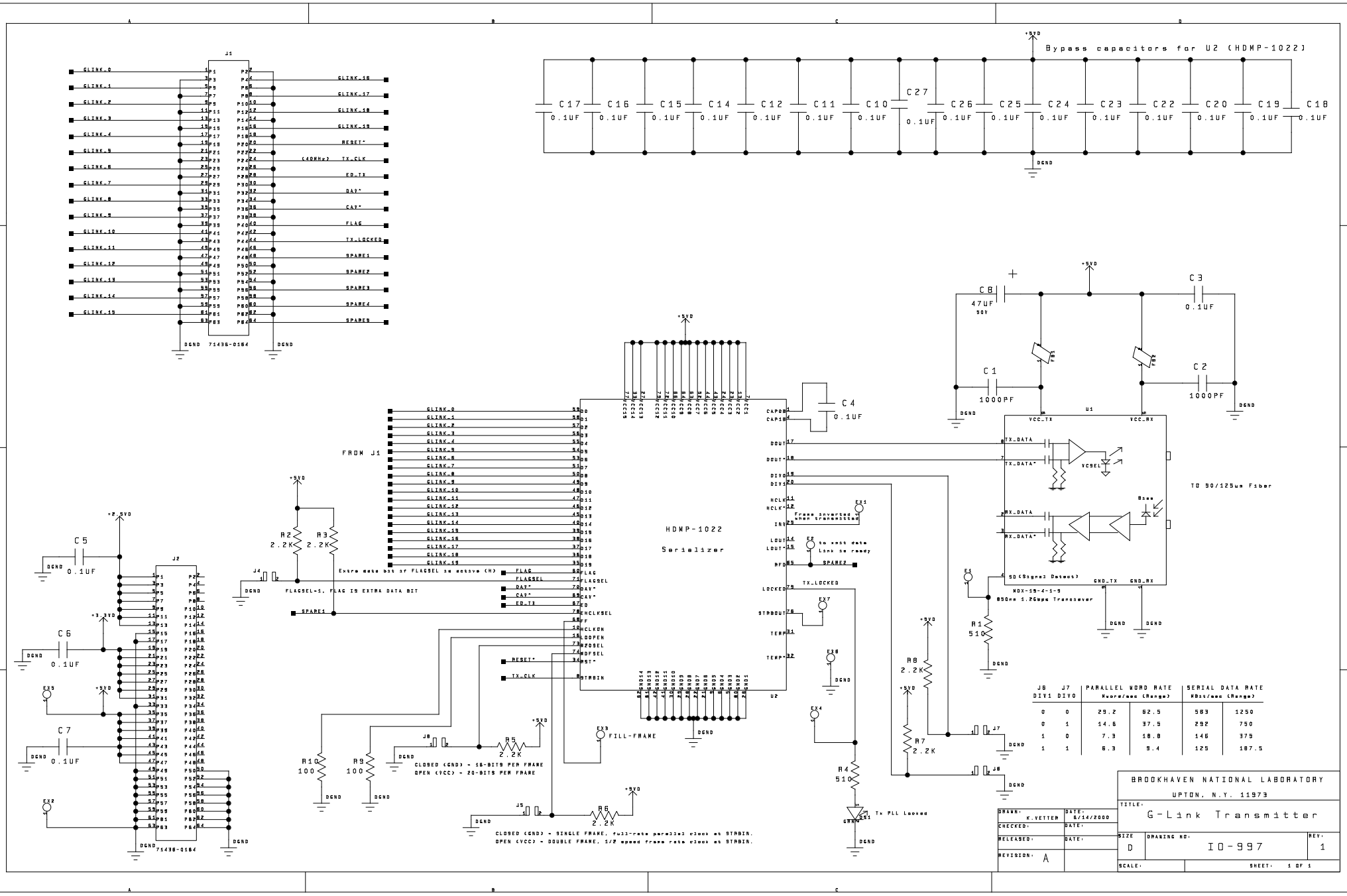
Bypass capacitors for U2 (HDMP-1022)
C17 0.1UF
C16 0.1UF
C15 0.1UF
C14 0.1UF
C12 0.1UF
C11 0.1UF
C10 0.1UF
C27 0.1UF
C26 0.1UF
C25 0.1UF
C24 0.1UF
C23 0.1UF
C22 0.1UF
C20 0.1UF
C19 0.1UF
C18 0.1UF
+5VD
DGND
J1
71436-0164
GLINK_0
GLINK_1
GLINK_2
GLINK_3
GLINK_4
GLINK_5
GLINK_6
GLINK_7
GLINK_8
GLINK_9
GLINK_10
GLINK_11
GLINK_12
GLINK_13
GLINK_14
GLINK_15
GLINK_16
GLINK_17
GLINK_18
GLINK_19
RESET*
(40MHz) TX_CLK
ED_TX
DAY*
CAY*
FLAG
TX_LOCKED
SPARE1
SPARE2
SPARE3
SPARE4
SPARE5
C8 47UF 50V
C3 0.1UF
C1 1000PF
C2 1000PF
FB1
FB2
U1
VCC_TX
VCC_RX
TX_DATA
TX_DATA*
VCSEL
RX_DATA
RX_DATA*
Bias
SD (Signal Detect)
GND_TX
GND_RX
MDX-15-4-1-9
850nm 1.26Gbps Transceiver
TO 50/125um Fiber
C4 0.1UF
HDMP-1022
Serializer
U2
FROM J1
Extra data bit if FLAGSEL is active (H)
FLAGSEL=1, FLAG IS EXTRA DATA BIT
R2 2.2K
R3 2.2K
J4
SPARE1
FLAG
FLAGSEL
DAY*
CAY*
ED
HCLKSEL
FF
HCLKON
LOOPEN
MZOSEL
MDFSEL
MST*
STRBIN
CAPQB
CAPIB
DOUT
DOUT*
DIV0
DIV1
HCLK
HCLK*
INV
LOUT
LOUT*
RFD
LOCKED
STRBOUT
TEMP
TEMP*
Frame inverted when transmitted
to xmit data Link is ready
SPARE2
TX_LOCKED
FILL-FRAME
C5 0.1UF
C6 0.1UF
C7 0.1UF
+2.5VD
+3.3VD
J2
71436-0164
R10 100
R9 100
J8
R5 2.2K
CLOSED (GND) = 16-BITS PER FRAME
OPEN (VCC) = 20-BITS PER FRAME
J5
R6 2.2K
CLOSED (GND) = SINGLE FRAME, full-rate parallel clock at STRBIN.
OPEN (VCC) = DOUBLE FRAME, 1/2 speed frame rate clock at STRBIN.
R4 510
Tx PLL Locked
R8 2.2K
R7 2.2K
J7
J6
R1 510
E1
E2
E3
E4
E5
E6
E7
E8
EX1
EX2
EX3
EX4
EX5
EX6
EX7
EX8
J6 DIV1 J7 DIV0
PARALLEL WORD RATE Nwore/sec (Range)
SERIAL DATA RATE MBit/sec (Range)
0 0 29.2 62.5 583 1250
0 1 14.6 37.5 292 750
1 0 7.3 18.8 146 375
1 1 6.3 9.4 125 187.5
BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973
TITLE: G-Link Transmitter
DRAWN: K.VETTER
DATE: 6/14/2000
CHECKED:
DATE:
RELEASED:
DATE:
REVISION: A
SIZE D
DRAWING NO: IO-997
REV: 1
SCALE:
SHEET: 1 OF 1