Fiber Based Timing and CAMAC Links, Repeater Assignments Summary

E4R-N Service Building — 20 amp repeater chassis
MI PIOXS, MI PIORS, MI BTRS, TCLK, MDAT(G), TVBS

MI-60CR, top — 20 amp repeater chassis
P2 BP, SWYD BP, MI PIOXS, MI PIORS, MI BTRS, RRBS, TCLK, MDAT(G), MIBS, BNE BP, APTVBS, MDAT(L), TVBS, TVBS, P1 BP
BRN/GRY is a dark fiber

MI-60CR, bottom — 20 amp repeater chassis
GRAY-R, BES, MIBSR, RRBSR, TVBSR, TVBS-FR, APTVBSR, TEV RF Clock, BMR (mod)

SciBooNe — 20 amp repeater chassis
TCLK, RCW

MI-65 Service Building — 10 amp repeater chassis
NuMI BP, MI PIOXN, MI PIORN, MI BTRN, MIBS, TCLK, MDAT(G)

NuMI Target Hall Support Room (THSR) — 20 amp repeater chassis
NuMI BP, MI PIOXN, MI PIORN, MI BTRN, MIBS, TCLK, MDAT(G)

BNE Target (MI-12) — 10 amp repeater chassis
BNE BP, C201, NuMI BP, MI PIOXN, MI PIORN, MI BTRN, MIBS, TCLK, MDAT(G), P1 BP
#53-17, #55-19 and #64-28 are dark

BNE Detector Building — 10 amp repeater chassis
MIBS, TCLK, MDAT(G)

MINOS Service Building (MSB) — 10 amp repeater chassis
NuMI BP, C201, NuMI PIOXN, NuMI PIORN, NuMI BTRN, MIBS, TCLK, MDAT(G)

MINOS Near Detector Hall (MND) — 10 amp repeater chassis
NuMI BP, NuMI PIOXN, NuMI PIORN, NuMI BTRN, MIBS, TCLK, MDAT(G)

NuMI Absorber Access Tunnel (AAT) — 10 amp repeater chassis
NuMI BP, NuMI PIOXN, NuMI PIORN, NuMI BTRN, MIBS, TCLK, MDAT(G)

E4R-S Fiber Dist. Box (on wall)

SciBooNe Fiber

MI-60S

MI-40 — 20 amp repeater chassis
RR BP, C201, MI ABT, MI PIOXS, MI PIORS, MI BTRS, RRBS, MIBS, TCLK, MDAT(G), MI PSL, BES
/36 connects with MI-30

MI-50 — 20 amp repeater chassis
RR BP, MI ABT, MI PIOXS, MI PIORS, MI BTRS, RRBS, MIBS, TCLK, MDAT(G), MI PSL, BES

MI-52 — 20 amp repeater chassis
MI ABT, MI PIOXS, MI PIORS, MI BTRS, RRBS, MIBS, TCLK, MDAT(G), MI PSL, TVBS, P1 BP
RR BP

MI-60N — 20 amp repeater chassis
RR BP, MI ABT, MI PIORN, MI BTRN, RRBS, MIBS, TCLK, MDAT(G), MI QXRR, MDAT(L), BES, NuMI BP, TVBS, BNE BP

MI-62 — 20 amp repeater chassis
MI ABT, MI PIOXN, MI PIORN, MI BTRN, RRBS, MIBS, TCLK, MDAT(G), MI QXRR, MI PSL, TVBS, BES, NuMI BP, RR BP, QXRX, QXRR, MDAT(L), BES

MI-8 — 20 amp repeater chassis
MI ABT, MI PIOXN, MI PIORN, MI BTRN, RRBS, MIBS, TCLK, MDAT(G), MI QXRR, MI PSL, TVBS, BES, NuMI BP, BNE BP, QXRX, QXRR, MDAT(L), BES

MI-10 — 20 amp repeater chassis
RR BP, MI ABT, MI PIOXN, MI PIORN, MI BTRF, *BLPSL*, TCLK, MDAT(G), TCLK $07, TCLK $5E, SWYD BP, MI PIOXF, MI PIORF, MI BTRF, *BLPSL*, TCLK, MDAT(G), TEV PIOX, TEV PIOR, TEV BTR, TEV ABRT, MDAT(L), BES, BNE BP, NuMI BP
53T-17 dark fiber

MI-20 — 20 amp repeater chassis
RR BP, MI ABT, MI PIOXN, MI PIORN, MI BTRN, RRBS, MIBS, TCLK, MDAT(G), QXRX, QXRR, MI PSL, BES, QXRX, QXRR, MDAT(L)

MI-30 — 20 amp repeater chassis
RR BP, MI ABT, MI PIOXN, MI PIORN, MI BTRN, RRBS, MIBS, TCLK, MDAT(G), QXRX, QXRR, MI PSL, MDAT(L), BES

MI-31 — 20 amp repeater chassis
RRBS, TCLK, MDAT(G)
/24 /36 connects with MI-40

Kautz Road Sub-Station
"ST" terminated on panel: 31 thru 72; 1 thru 12
/12 for Controls Links (DDC) routed via the FMI road duct banks
/12 for Controls Networkrouted via the FMI road duct banks
"ST" terminated at Network shelf in rack MI60115

24 individual "ST" terminated light buthe jumpers (routed via innerduct) are spares for connecting MI-60S with MI-60CR. Five of these are damaged. The dark fibers are C, K, P, W, and Y.

/36 routed via the FMI road duct banks, not routed into service buildings

Central Utility Bldg.
"ST" terminated on panel: 49 thru 60, 61 thru 72
24 fibers fusion spliced

/36 routed via the Fermi Utility Tunnels

three sets of three 1/4" Heliax' cables connect with SLD's in the Main Computer Room

dark fiber: (BRN) (BLK) (BLU) (BLK); (ORN) (BRN) (RED) (RED); (GRN) (RED) (GRN) (YEL); (GRY) (YEL) (PNK) (VIO); (WHI) (GRN) (AQU) (AQU)

Bstr. East Tower — 10 amp repeater chassis
NCAMAC PIOX, NCAMAC PIOR, NCAMAC BTR, TVBS, RRBS, MIBS, TCLK, MDAT(G)

TG-9 (Network Rack) — 10 amp repeater chassis
RRBS, MIBS, TCLK, MDAT(G), TVBS

Computer Room part of patch panels in RR47 (Network)
shelf 3, shelf 1, part of DA shelf (Network)

Computer Room RR-22 (Network Rack) — 20 amp repeater chassis
TCLK, MDAT (G), MIBS, TVBS

Computer Room SECOR patch panel RR#24
to FCC 3rd flr Lab Space
to WH-14SW Lab Space

TCLK to EAD via NS1
TCLK from EAD
BD:ACC #1 with EAD (GRN)
BD:ACC #2 with EAD (BRN)
BD:ACC #4 with EAD (WHI)
RDDLS Start
RDDLS Clock
RDDLS Count
RDDLS Parity
Controls Ethernet, NS1
Controls Ethernet, NS1
BSCLK to KTEV
BD:ACC #3 with EAD (GRY)
TCLK to EAD (BLU)
MIBS to EAD (ORN)
Safety System
Safety System
Controls Ethernet, EAD
Controls Ethernet, EAD
Controls Ethernet, Wideband
Controls Ethernet, Wideband

via Math Assc. modules
via Math Assc. modules
failed OTOR at EAD end
connected at but not needed
connected at but not needed
connected at but not needed
connected at but not needed
no connection at EAD
no connection at EAD
via Math Assc. modules

MAC Room patch panel in rack #6
to EAD Electronics Room patch panel in RR-3

MAC(MI), middle — 20 amp repeater chassis
RR BP, MI ABT, MI PIOXS, MI PIORS, MI BTRS, RRBS, MIBS, TCLK, MDAT(G) (modified), BNE BP, NuMI BP, P2 BP, MDAT(L), TVBS, TCLK, P1 BP

MAC(AUX), top — 20 amp repeater chassis
MI PIOXN, MI PIORN, MI BTRN, RRBS, MIBS, TCLK, MDAT(G), *SWYD PIOX*, *SWYD PIOR*, *SWYD BTR*, MIBS, TVBS, TCLK, MIBS
Interface blocks to be moved to new location in rack #6 (when digital signal line is ready)

MAC(BL), bottom — 20 amp repeater chassis
SWYD BP, MI PIOXF, MI PIORF, MI BTRF, *BLPSL*, TCLK, MDAT(G), TEV PIOX, TEV PIOR, TEV BTR, TEV ABRT, TCLK $07, TCLK $5E, P3/SWYD BP, TEV ABRT, TEV RF Clock, MIBS, APTVBS
MIBS to SSB via A2

TG-5 (A0) — 20 amp repeater chassis
MI PIOXS, MI PIORS, MI BTRS, *BLPSL*, TCLK, MDAT(G), TEV ABRT, TVBS, APTVBS, MIBS

A0 MVA Bldg.
36 fibers rotary mechanical splced
SWYD BP, 60

F0N — 10 amp repeater chassis
P1 BP, C201, MI PIOXS, MI PIORS, MI BTRS, TCLK, MDAT(G), P2 BP, TVBS, MIBS
#13 thru #24 not used
F0N: 36 fibers fusion spliced (in cable trench)

F17 — 10 amp repeater chassis
P1 BP, C201, MI PIOXS, MI PIORS, MI BTRS, TCLK, MDAT(G), TVBS, MIBS

F0S — 24 fibers fusion spliced

F0S — 20 amp repeater chassis
MI PIOXS, MI PIORS, MI BTRS, TCLK, MDAT(G), TVBS-F(S), TVBS, TEV ABRT, MDAT(L), APTVBS-F(S), MIBS, P1 BP, P2 BP
#13 thru #24 not connected to the patch panel
#13 thru #24 not used
connects with E4 (routed via the North end of F0)

F1 — 20 amp repeater chassis
MI PIOXS, MI PIORS, MI BTRS, BLPSL, TCLK, MDAT(G), TEV PIOX, TEV PIOR, TEV BTR, TEV ABRT, P2 BP, TVBS, APTVBS, MIBS
#13 thru #24 not connected to the patch panel
all six Green tube fibers are fusion spliced through

F2 — 20 amp repeater chassis
P3 BP, C201, MI PIOXS, MI PIORS, MI BTRS, BLPSL, TCLK, MDAT(G), TEV PIOX, TEV PIOR, TEV BTR, TEV ABRT, P2 BP, TVBS, APTVBS, MIBS
at six Green tube fibers are fusion spliced through

F3 — 20 amp repeater chassis
P3 BP, MI PIOXS, MI PIORS, MI BTRS, BLPSL, TCLK, MDAT(G), TEV PIOX, TEV PIOR, TEV BTR, TEV ABRT, TVBS, APTVBS, MIBS
all six Green tube fibers are fusion spliced through

F4 — 20 amp repeater chassis
P3 BP, MI PIOXS, MI PIORS, MI BTRS, BLPSL, TCLK, MDAT(G), TEV PIOX, TEV PIOR, TEV BTR, TEV ABRT, TVBS, APTVBS, MIBS
at six Green tube fibers are fusion spliced through

TVBS-FS (DO-COF); TVBSR; TVBS-FR; APTVBS-F; APTVBS; TVBS-F; TEV RF Clock; APTVBSR; QPM

Blue color shows items not yet installed.

ITEM NO.	PART NO.	DESCRIPTION OR SIZE	QTY. REQ.
		PARTS LIST	

UNLESS OTHERWISE SPECIFIED — FRACTIONS, DECIMALS, ANGLES

ORIGINATOR	Terry Hendricks	7/25/97
DRAWN	Terry Hendricks	5/9/01
LAST REVISED	Greg Vogel	4/2/07
APPROVED	Greg Vogel	
Software: Ashler Vellum Draft-Version 3.2.8		
Source Reference:		

FERMI NATIONAL ACCELERATOR LABORATORY
UNITED STATES DEPARTMENT OF ENERGY

SCALE — DRAWING NUMBER: d:/doc/overview/fiber rptr assn.vlm — REV. W