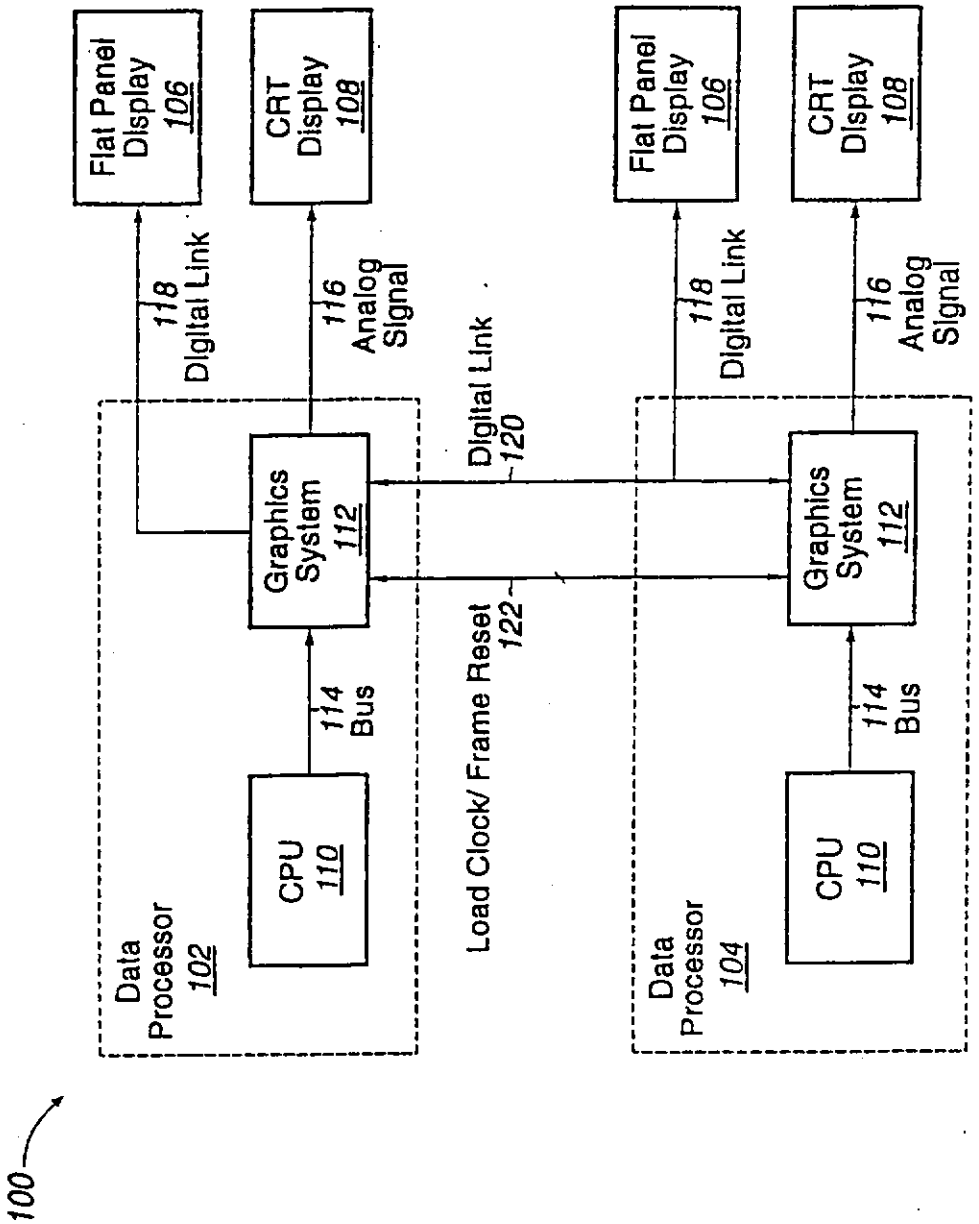

Flat Panel Display 106
CRT Display 108
Flat Panel Display 106
CRT Display 108
118 Digital Link
116 Analog Signal
118 Digital Link
116 Analog Signal
Digital Link 120
Graphics System 112
Graphics System 112
Load Clock/ Frame Reset 122
114 Bus
114 Bus
CPU 110
CPU 110
Data Processor 102
Data Processor 104
100

Fig. 1

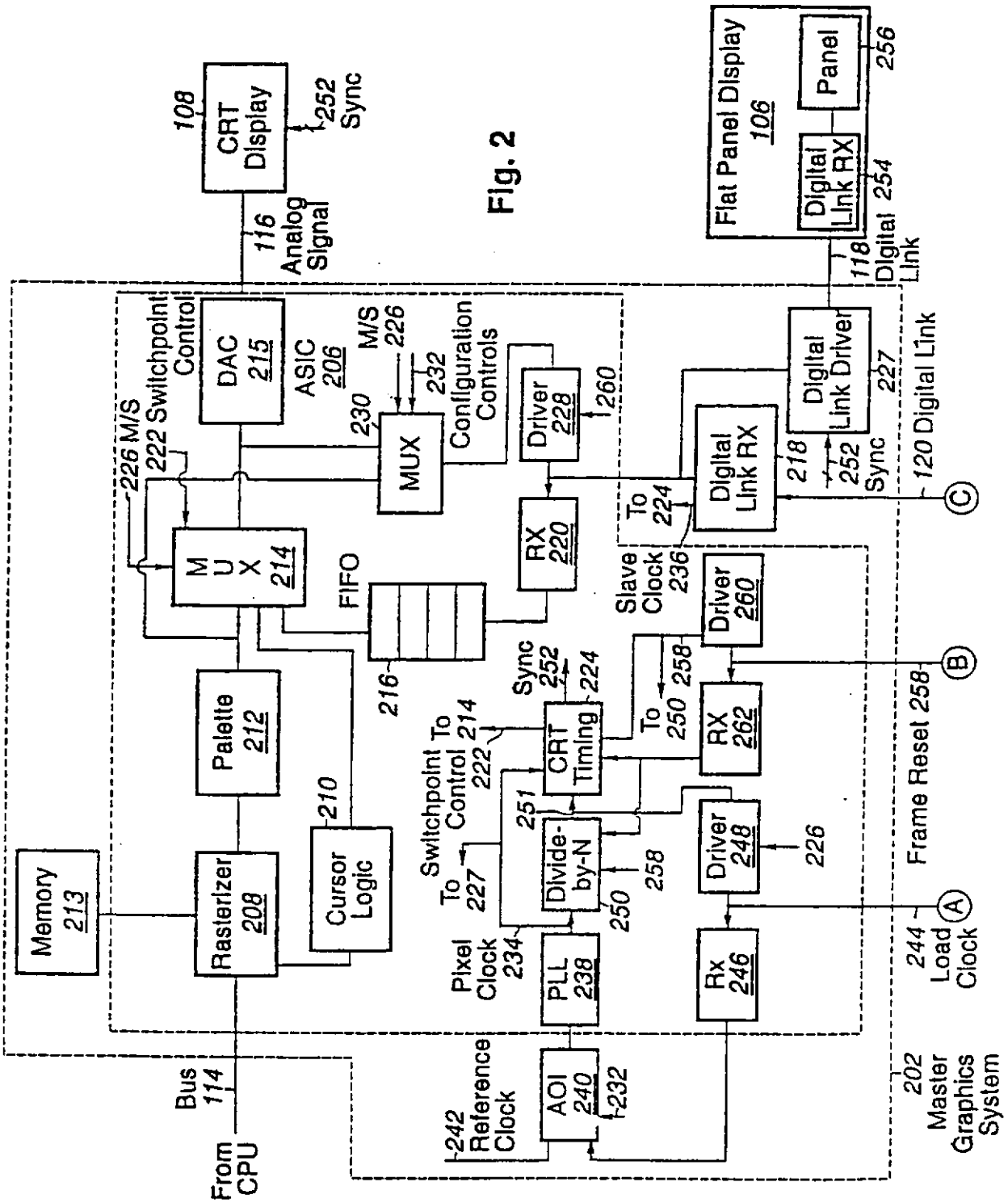
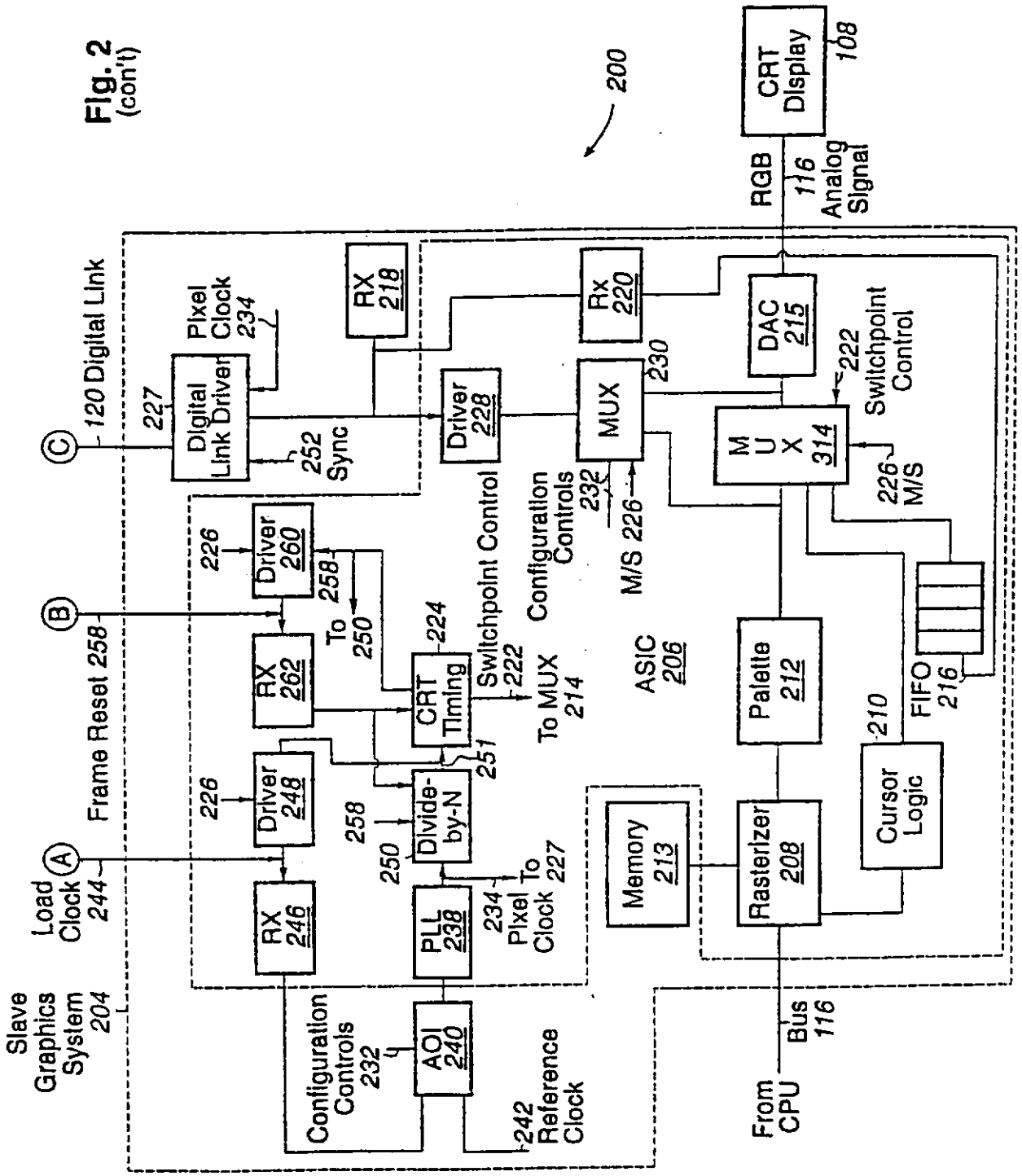

108 CRT Display
252 Sync
116 Analog Signal
Flat Panel Display 106
Panel 256
Digital Link RX 254
118 Digital Link
DAC 215
ASIC 206
M/S 226
232 Configuration Controls
230
MUX
Driver 228
260
226 M/S
222 Switchpoint Control
MUX 214
FIFO
216
RX 220
Digital Link RX 218
Digital Link Driver 227
252 Sync
120 Digital Link
To 224
Slave Clock 236
Driver 260
Sync 252
224
To 250
258
RX 262
To 214
Switchpoint Control 222
CRT Timing
Palette 212
210
Cursor Logic
Memory 213
Rasterizer 208
251
Divide-by-N
Driver 248
226
Frame Resel 258
To 227
Pixel Clock 234
PLL 238
250
258
Rx 246
244 Load Clock
Bus 114
From CPU
242 Reference Clock
AOI 240
232
202 Master Graphics System

Fig. 2

Fig. 2 (con't)


200
CRT Display 108
RGB 116 Analog Signal
120 Digital Link
Pixel Clock 234
Digital Link Driver 227
252 Sync
RX 218
Rx 220
DAC 215
222 Switchpoint Control
Driver 228
MUX 230
M U X 314
226 M/S
Configuration Controls 232
M/S 226
Switchpoint Control
Driver 260
226
258
To 250
RX 262
CRT Timing 224
222
To MUX 214
ASIC 206
Palette 212
FIFO 216
210
Frame Reset 258
Driver 248
226
Divide-by-N 251
258
250
Memory 213
Cursor Logic
Load Clock 244
RX 246
PLL 238
234 Pixel To Clock 227
Rasterizer 208
Slave Graphics System 204
Configuration Controls 232
AOI 240
242 Reference Clock
From CPU
Bus 116

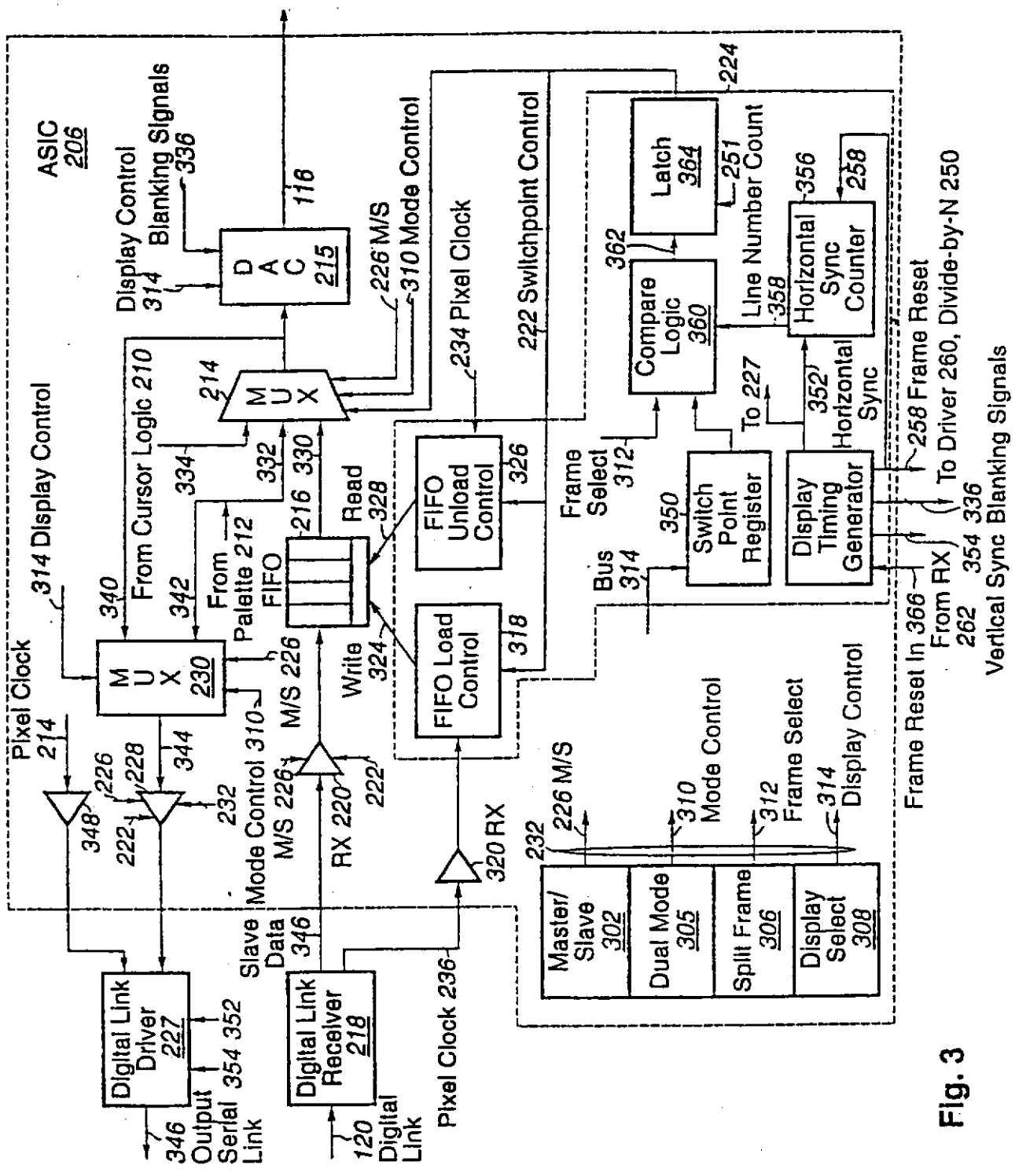

ASIC 206
Display Control 314
Blanking Signals 336
DAC 215
116
226 M/S
310 Mode Control
234 Pixel Clock
222 Switchpoint Control
224
Latch 364
251
Line Number Count
362
Compare Logic 360
358
Horizontal Sync Counter 356
258
From Cursor Logic 210
214
MUX
334
332
330
216
From Palette 212
FIFO
Read 328
FIFO Unload Control 326
Frame Select 312
To 227
352
Horizontal Sync
340
342
314 Display Control
MUX 230
Pixel Clock 214
348
226
228
222
344
232
Mode Control 310
M/S 226
RX 220
222
Write 324
FIFO Load Control 318
350
Switch Point Register
Bus 314
Display Timing Generator
258 Frame Reset
To Driver 260, Divide-by-N 250
Vertical Sync 354
Blanking Signals 336
From RX 366
262
Frame Reset In
320 RX
232
226 M/S
310 Mode Control
312 Frame Select
314 Display Control
Master/ Slave 302
Dual Mode 305
Split Frame 306
Display Select 308
Slave Data 346
Digital Link Driver 227
Digital Link Receiver 218
Pixel Clock 236
346 Output Serial Link
354 352
120 Digital Link

Fig. 3

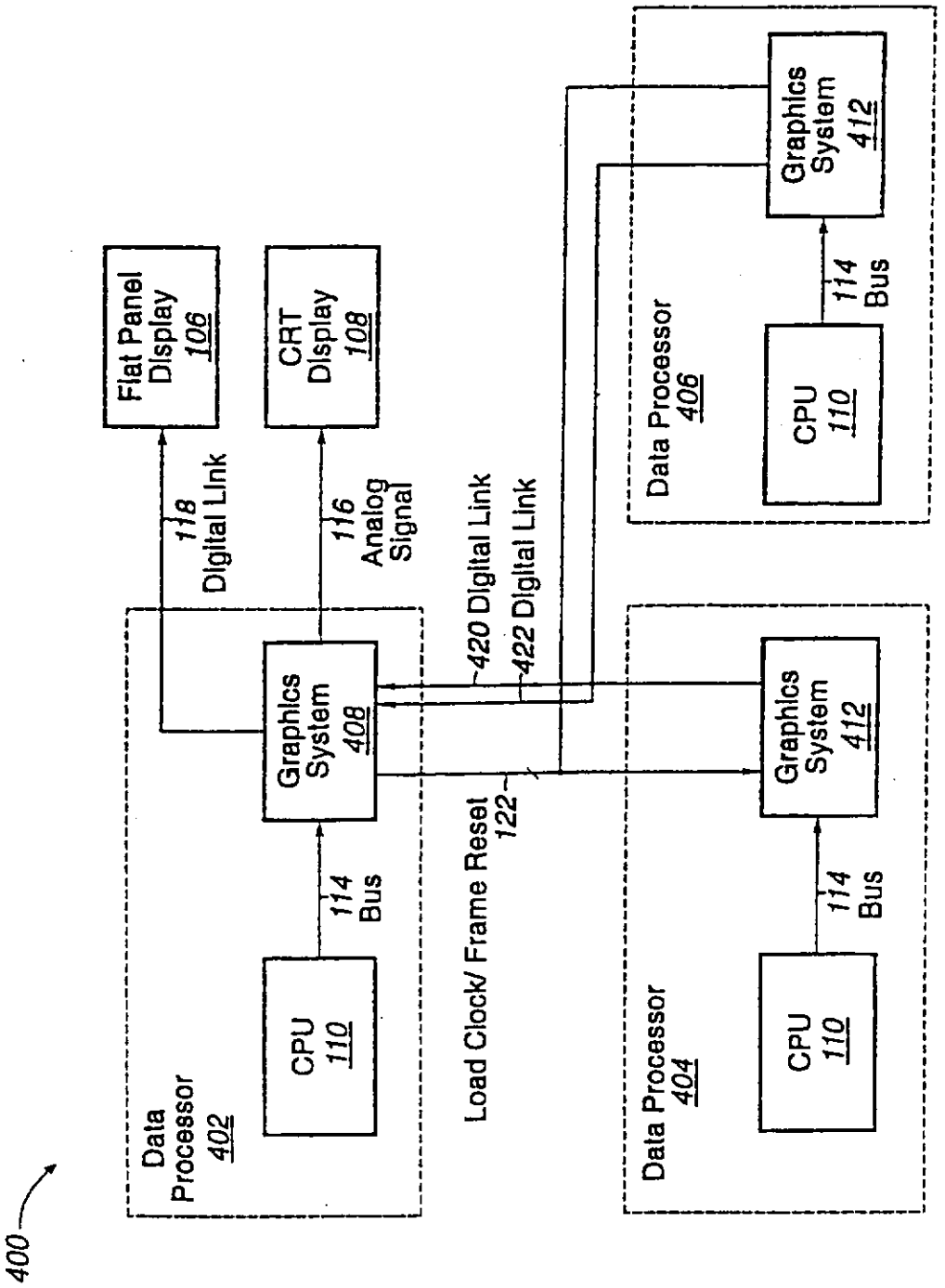

400
Data Processor 402
CPU 110
114 Bus
Graphics System 408
118 Digital Link
116 Analog Signal
Flat Panel Display 106
CRT Display 108
Load Clock/ Frame Reset 122
420 Digital Link
422 Digital Link
Data Processor 404
CPU 110
114 Bus
Graphics System 412
Data Processor 406
CPU 110
114 Bus
Graphics System 412

Fig. 4

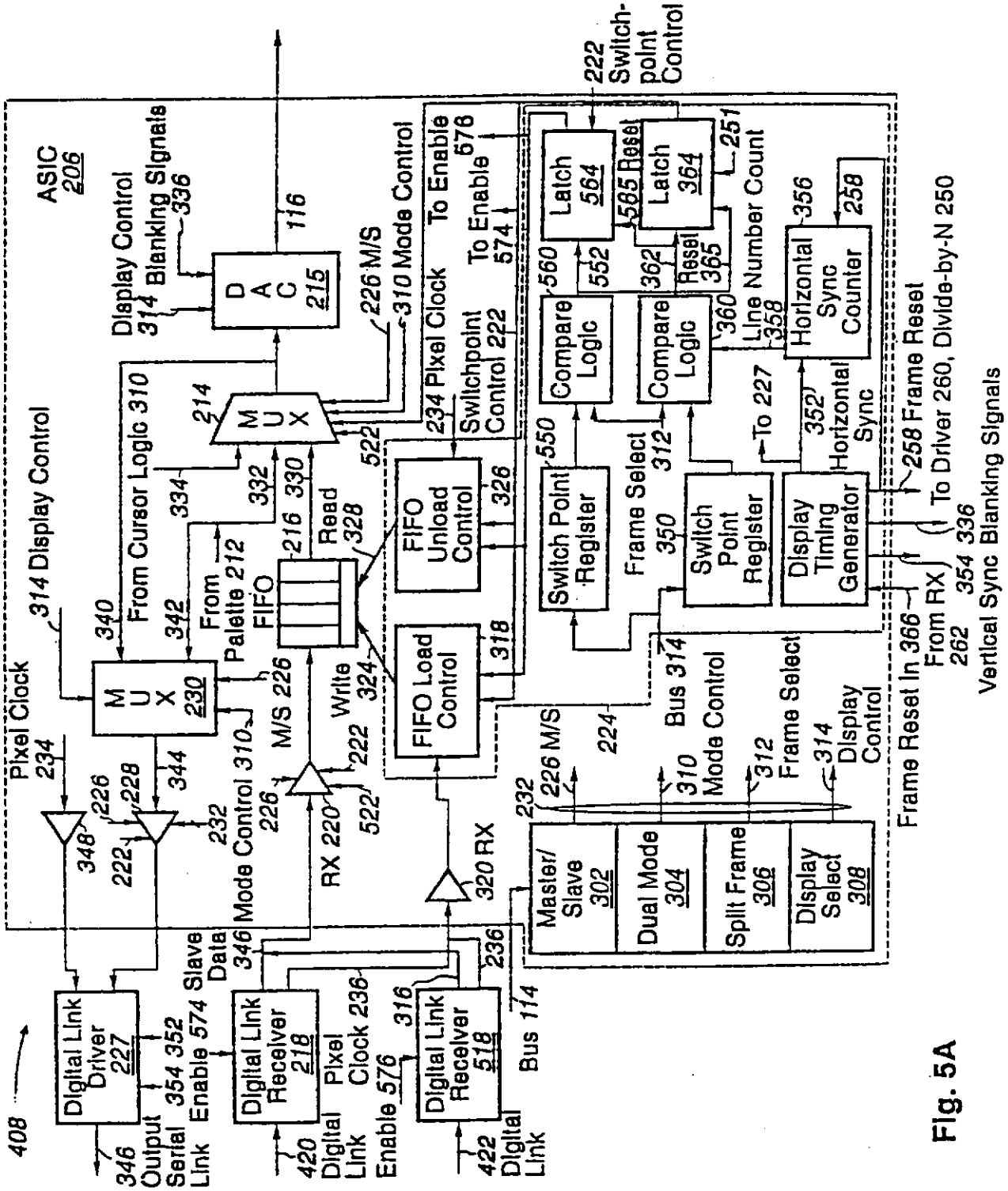

ASIC 206
314 Display Control
Pixel Clock 234
From Cursor Logic 310
340
342
From Palette 212
FIFO
216
330
332
334
Read 328
Write 324
M/S 226
Mode Control 310
232
344
226
228
348
222
RX 220
522
FIFO Load Control
318
FIFO Unload Control
326
522
214
M U X
Display Control 314 Blanking Signals 336
D A C 215
116
226 M/S
310 Mode Control
234 Pixel Clock
Switchpoint Control 222
To Enable 676
To Enable 574
222 Switch-point Control
Latch 564
585 Reset
Latch 364
251
Line Number Count
358
Horizontal Sync Counter 258
356
Compare Logic 560
552
362
Reset 365
Compare Logic
360
Switch Point Register 550
Frame Select 312
Switch Point Register 350
To 227
352 Horizontal Sync
Display Timing Generator
258 Frame Reset
To Driver 260, Divide-by-N 250
From RX 366
262
354 336
Vertical Sync Blanking Signals
Frame Reset In
Bus 314
224
226 M/S
310 Mode Control
312 Frame Select
314 Display Control
232
Master/ Slave 302
Dual Mode 304
Split Frame 306
Display Select 308
320 RX
Bus 114
236
Slave Data 346
Pixel Clock 236
316
Digital Link Receiver 518
Digital Link Receiver 218
Digital Link Driver 227
354 352
Enable 574
Output Serial Link
346
420
Digital Link
Enable 576
422
Digital Link
408

Fig. 5A

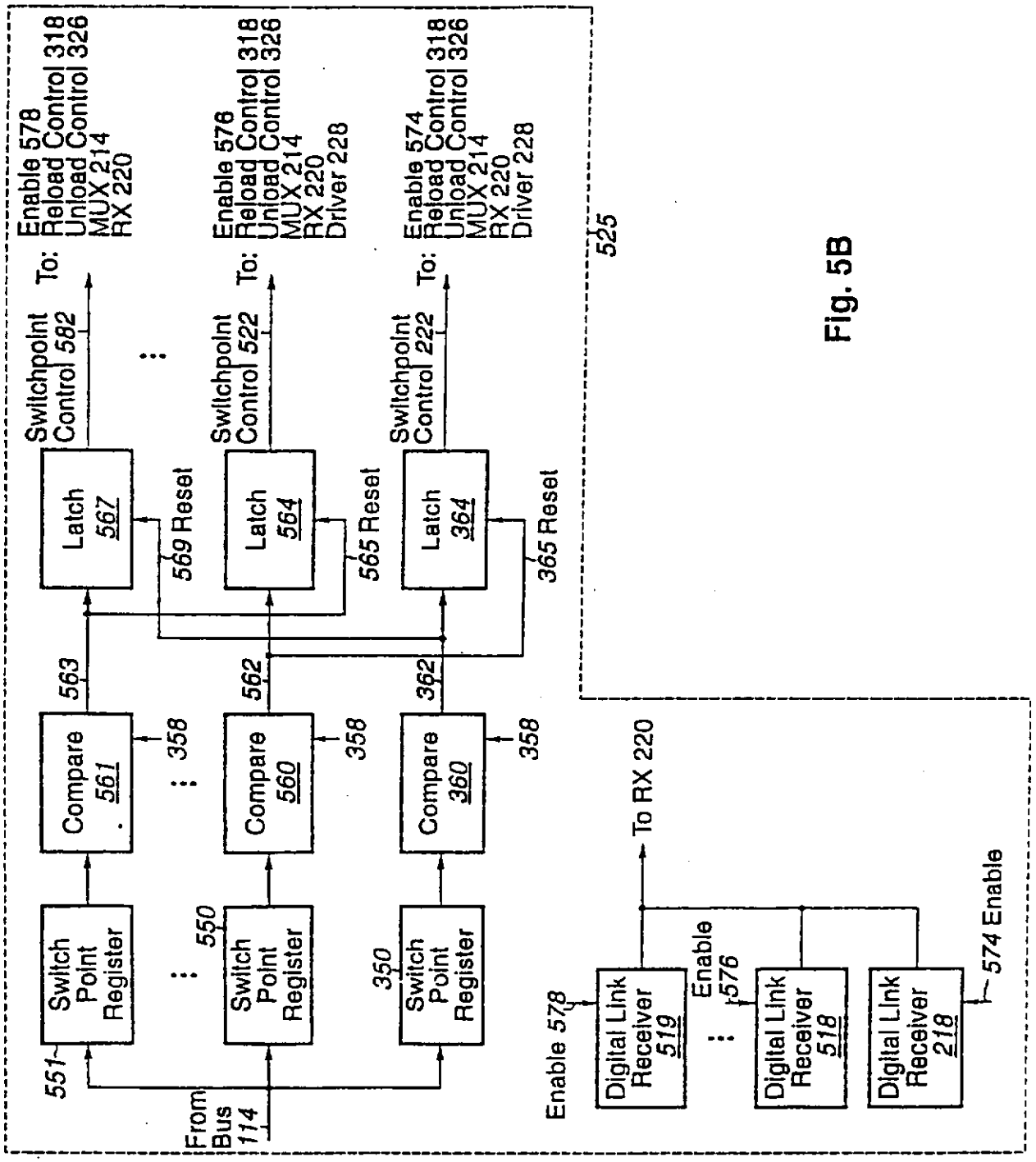

Enable 578 Reload Control 318 Unload Control 326 MUX 214 RX 220
To:
Switchpoint Control 582
Enable 576 Reload Control 318 Unload Control 326 MUX 214 RX 220 Driver 228
To:
Switchpoint Control 522
Enable 574 Reload Control 318 Unload Control 326 MUX 214 RX 220 Driver 228
To:
Switchpoint Control 222
525
Latch 567
569 Reset
Latch 564
565 Reset
Latch 364
365 Reset
563
562
362
Compare 561
358
Compare 560
358
Compare 360
358
To RX 220
Switch Point Register
551
Switch Point Register
550
Switch Point Register
350
From Bus 114
Enable 578
Digital Link Receiver 519
Enable 576
Digital Link Receiver 518
Digital Link Receiver 218
574 Enable

Fig. 5B

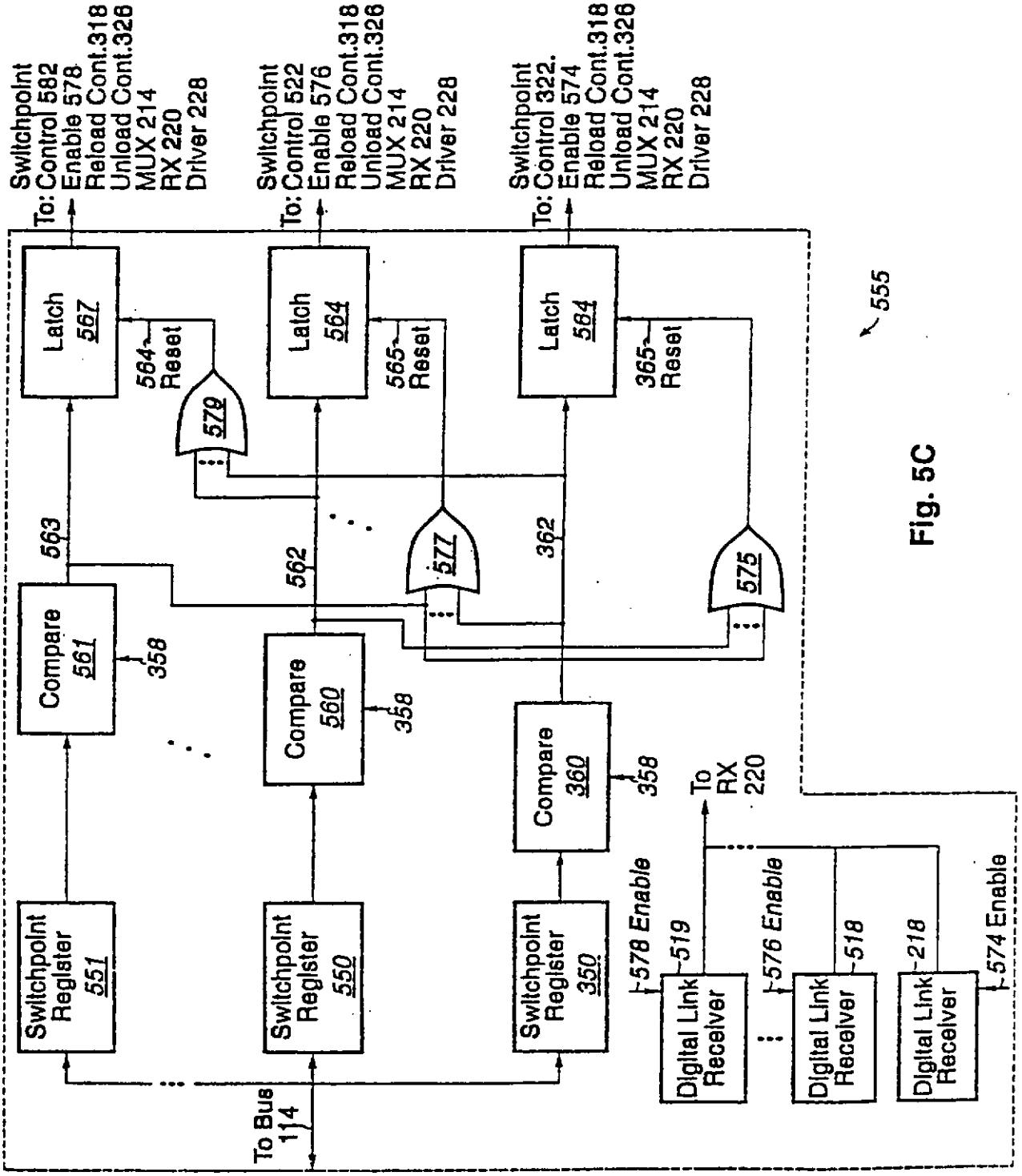

Switchpoint To: Control 582 Enable 578 Reload Cont.318 Unload Cont.328 MUX 214 RX 220 Driver 228
Switchpoint To: Control 522 Enable 576 Reload Cont.318 Unload Cont.326 MUX 214 RX 220 Driver 228
Switchpoint To: Control 322. Enable 574 Reload Cont.318 Unload Cont.326 MUX 214 RX 220 Driver 228
555
Latch 567
Latch 564
Latch 584
584 Reset
565 Reset
365 Reset
579
577
575
563
562
362
Compare 561
Compare 560
Compare 360
358
358
358
To RX 220
Switchpoint Register 551
Switchpoint Register 550
Switchpoint Register 350
578 Enable
576 Enable
574 Enable
519
518
218
Digital Link Receiver
Digital Link Receiver
Digital Link Receiver
To Bus 114

Fig. 5C