FIG. 1

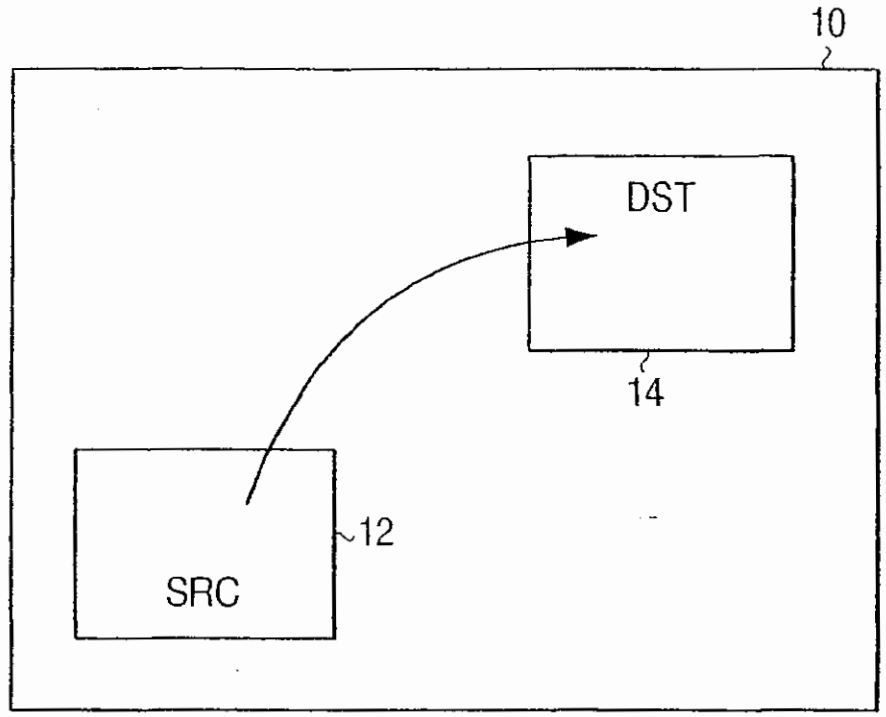


FIG. 2

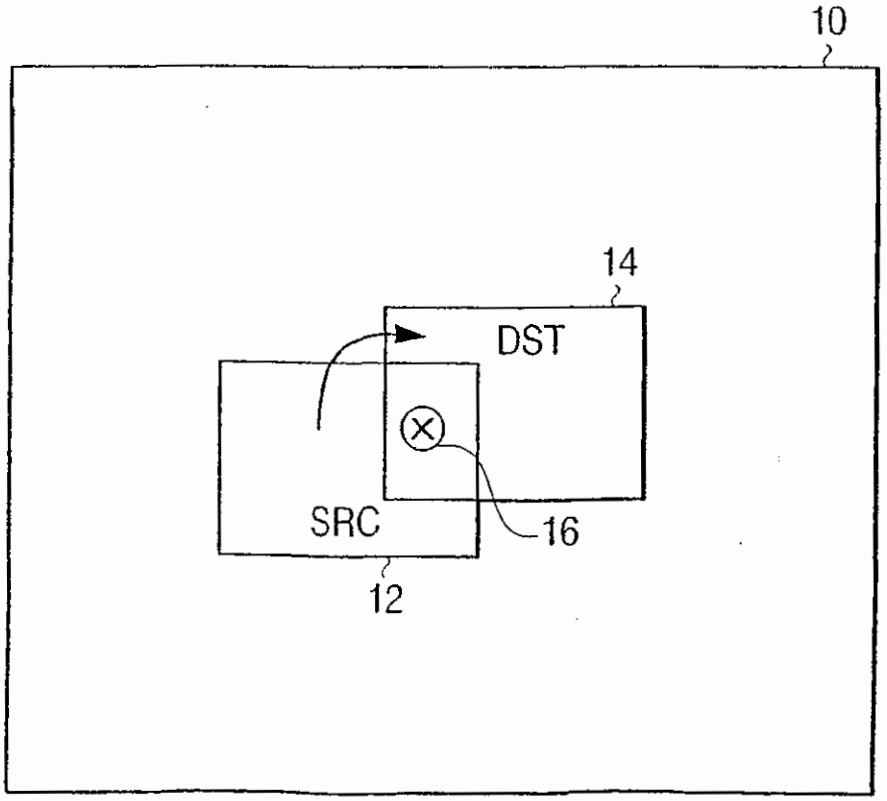


FIG. 3

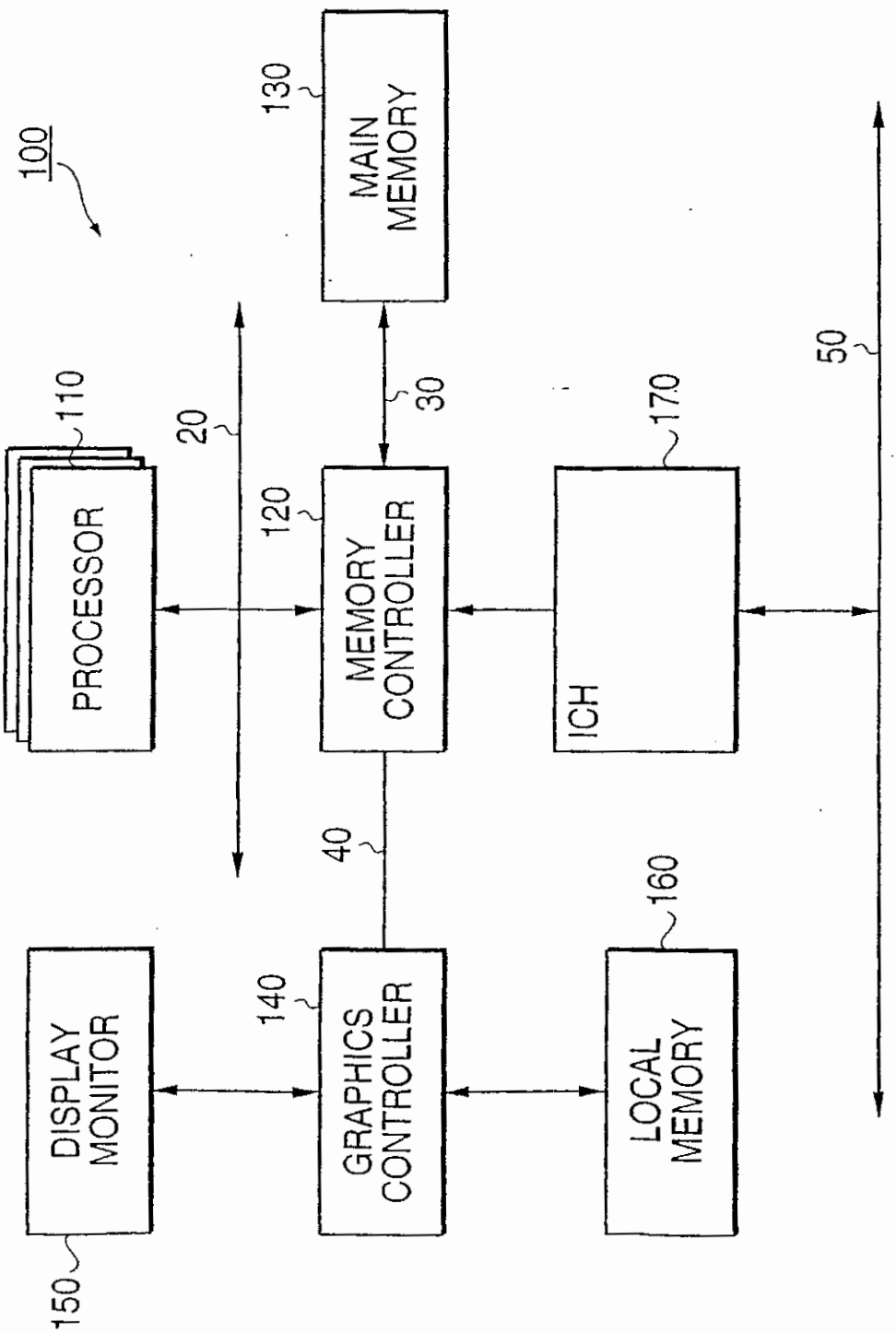

100
MAIN MEMORY
130
PROCESSOR
110
20
MEMORY CONTROLLER
120
30
ICH
170
50
40
DISPLAY MONITOR
150
GRAPHICS CONTROLLER
140
LOCAL MEMORY
160

FIG. 4

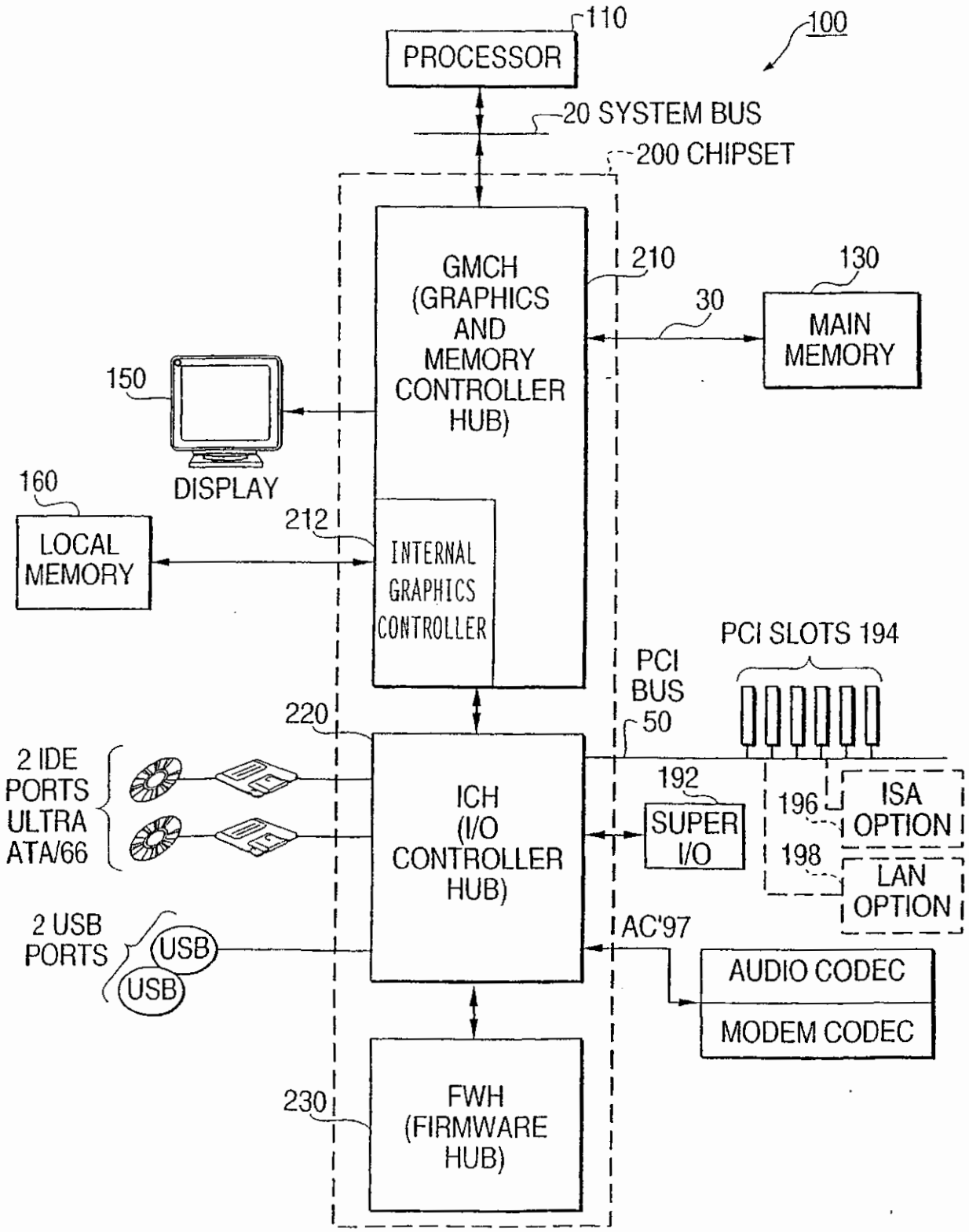

110
PROCESSOR
100
20 SYSTEM BUS
200 CHIPSET
GMCH (GRAPHICS AND MEMORY CONTROLLER HUB)
210
130
30
MAIN MEMORY
150
DISPLAY
160
LOCAL MEMORY
212
INTERNAL GRAPHICS CONTROLLER
PCI SLOTS 194
PCI BUS 50
220
2 IDE PORTS ULTRA ATA/66
ICH (I/O CONTROLLER HUB)
192
SUPER I/O
196
ISA OPTION
198
LAN OPTION
2 USB PORTS
USB
USB
AC'97
AUDIO CODEC
MODEM CODEC
230
FWH (FIRMWARE HUB)

FIG. 6

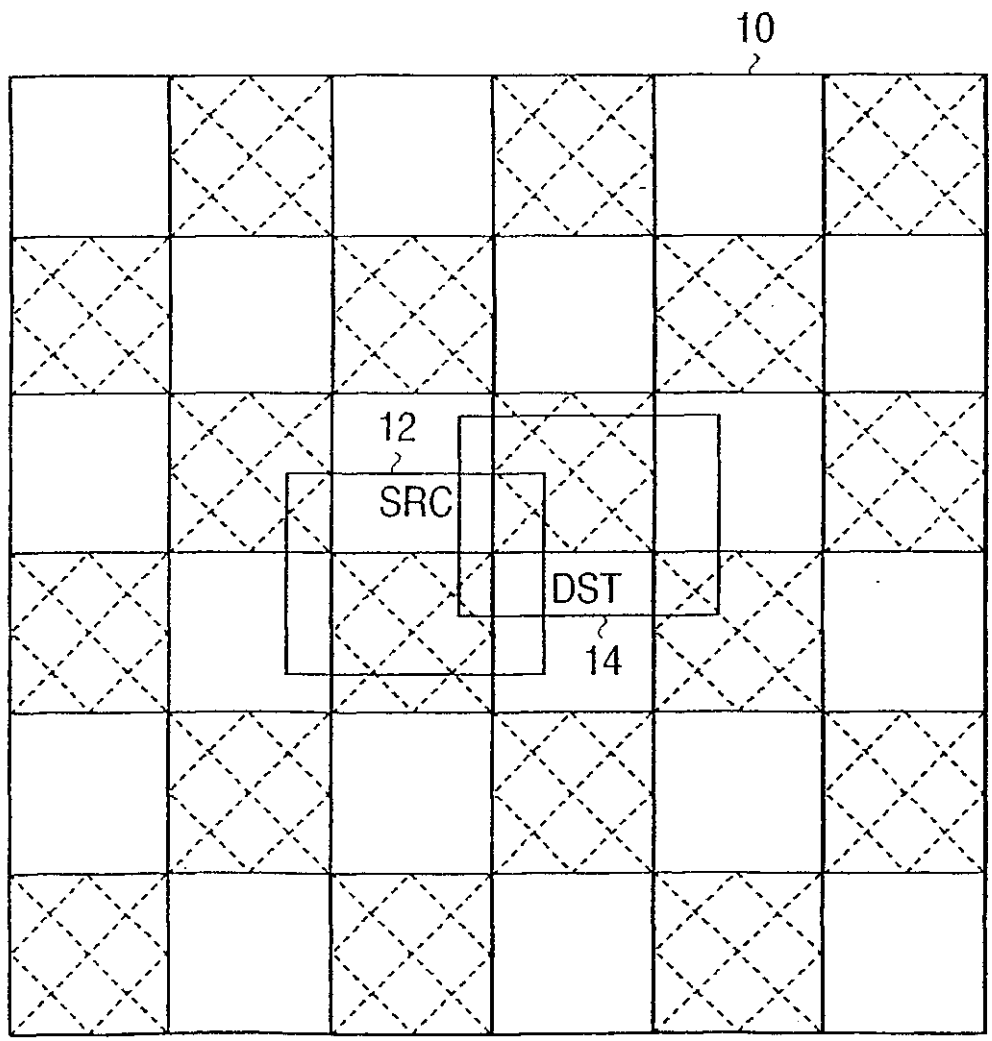


FIG. 7

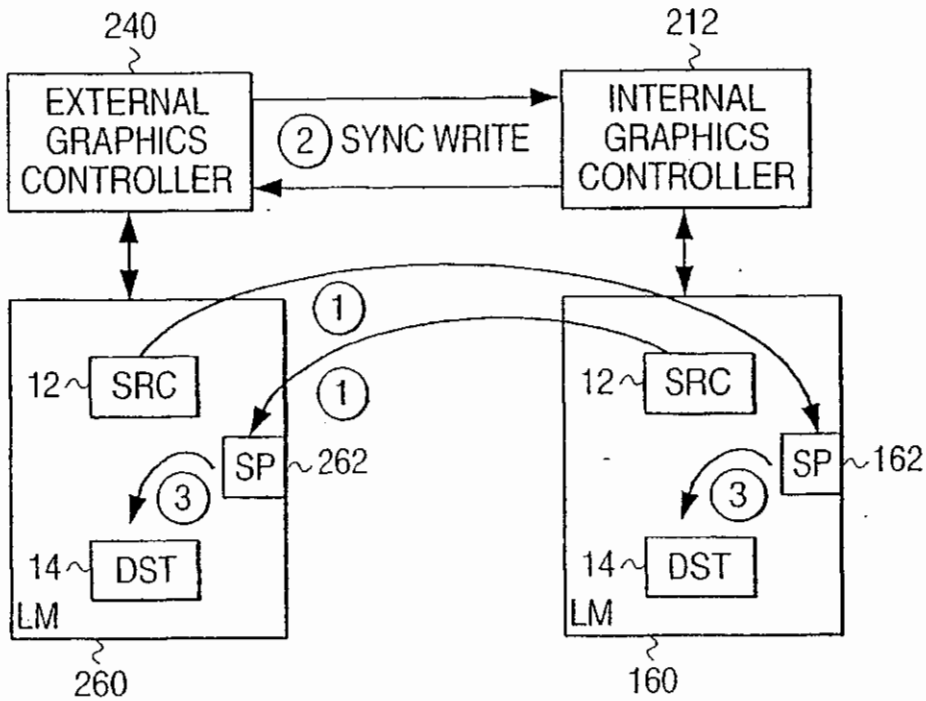
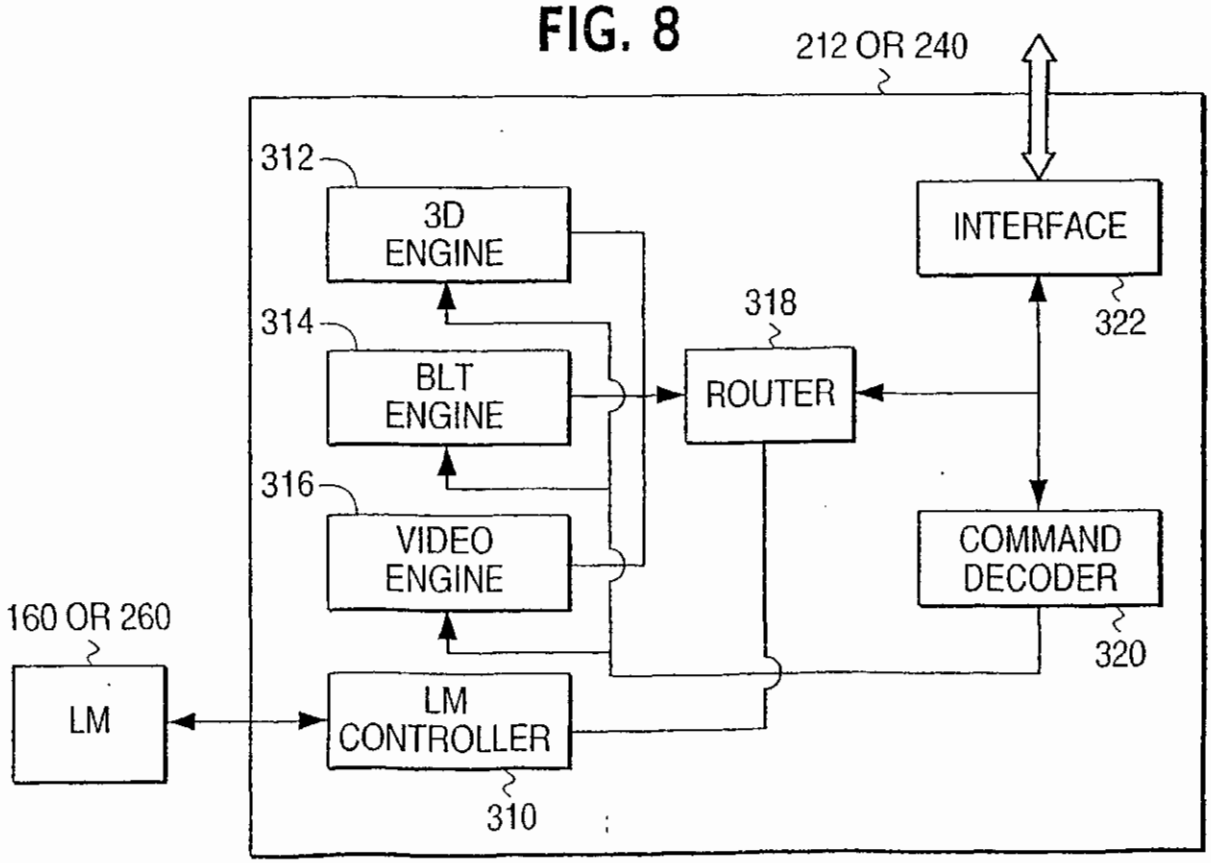

240
212
EXTERNAL GRAPHICS CONTROLLER
2 SYNC WRITE
INTERNAL GRAPHICS CONTROLLER
1
1
12
SRC
SP
262
3
14
DST
LM
260
12
SRC
SP
162
3
14
DST
LM
160

FIG. 8


212 OR 240
312
3D ENGINE
314
BLT ENGINE
316
VIDEO ENGINE
318
ROUTER
INTERFACE
322
COMMAND DECODER
320
160 OR 260
LM
LM CONTROLLER
310