EXHIBIT   E

Block Diagram

FUNCTIONAL BLOCK DIAGRAM
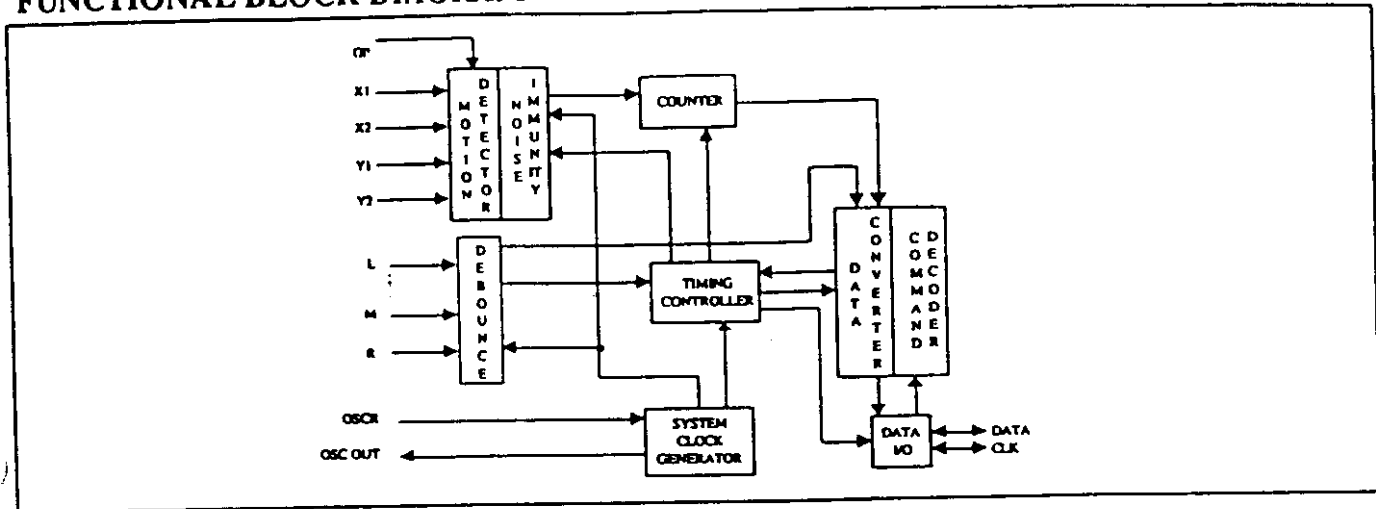
PIN DESCRIPTIONS

Symbol	I/O	Function
V_{DD}		Power
OP	I	X, Y inputs. Floating : Comparator input. GND : Schmitt trigger input. Short to OSC OUT : Testing Mode.
OSCOUT	O	Clock output.
CLK	I/O	8042 auxiliary port CLK line.
DATA	I/O	8042 auxiliary port DATA line.
V_{SS}		Ground
R M L	I	Three key-switches exert seven different combinations totally. Both key-pressed and key-released signals will be sent accompanied with horizontal and vertical state. The status of the key-switches will be preserved, whenever the value of horizontal or vertical counters will present at DATA. And the debounce interval for both key-press and key-release is 12 ms.
X1 X2 Y1 Y2	I	Four photo-couple signals denote UP, DOWN, LEFT, and RIGHT state. During the scaning period, as long as the photo-couples change their states, the value of vertical or horizontal counter will increase or decrease accordingly.
OSCR	I	30 Kohm ±5% pull low for 35 KHz oscillation.

FUNCTION DESCRIPTIONS

A) Operating mode

There are four operating modes in PS/2 mouse

i). Reset Mode
In this mode a self-test is initiated during power-on or by a Reset command. After reset signal, PS/2 mouse will send: