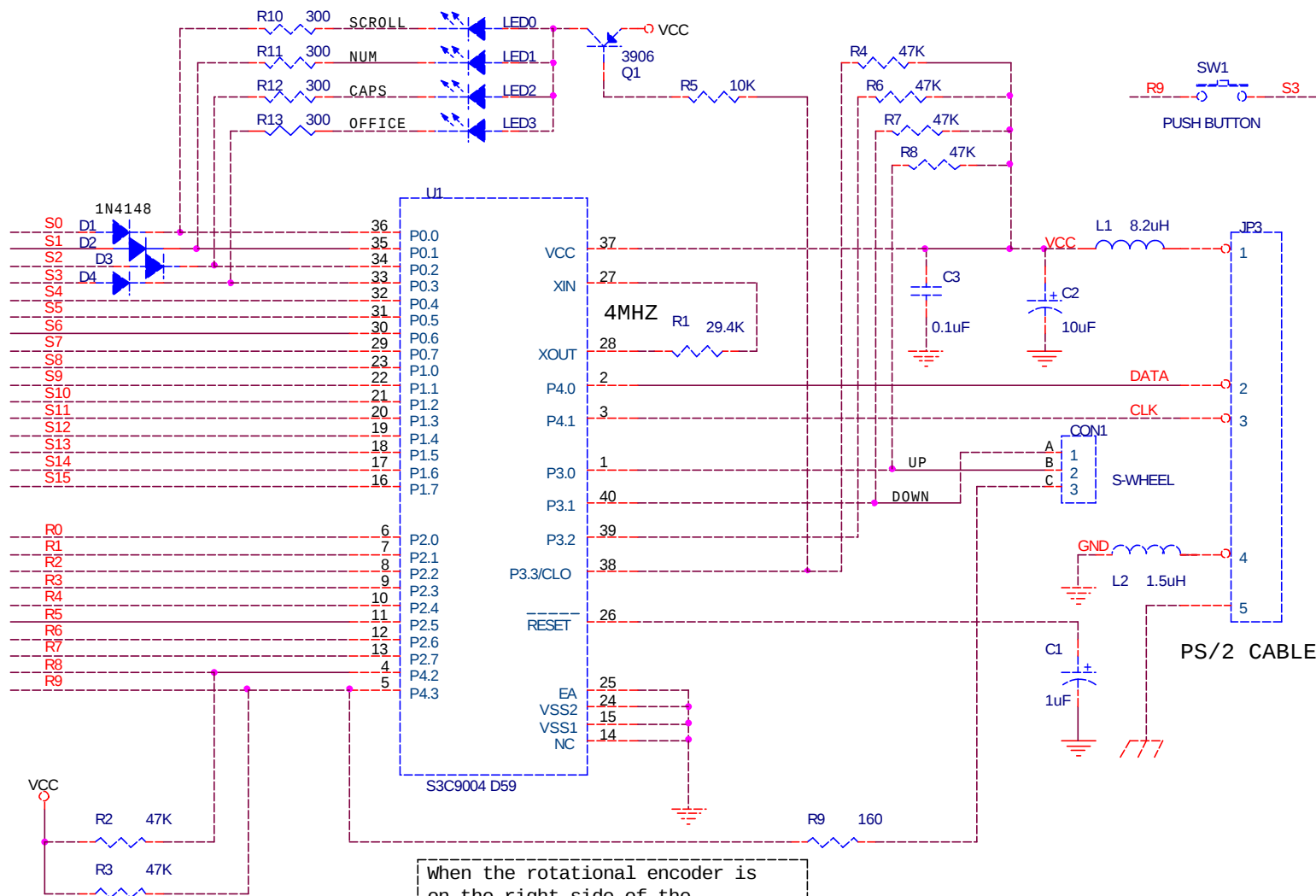




#### NOTE:

1.R1 IS METAL RESISTOR(1%)

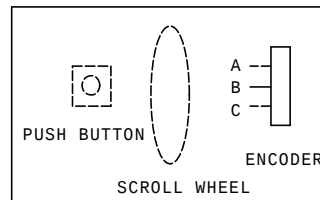
2.ALL I/O PIN Same as Samsung KS86C0004

OTP chip :

PINS USED TO READ/WRITE THE EPROM

37-->VDD      36-->SCLK      35-->SDAT  
26-->RESET      24-->VPP      15-->VSS

When the rotational encoder is on the right side of the scroll wheel PCB, the figure is as below.



|                |                         |              |
|----------------|-------------------------|--------------|
| Title          |                         |              |
| 8190A PS/2 K/B |                         |              |
| Size           | Document Number         | Rev          |
| A              | <Doc>                   |              |
| Date:          | Saturday, June 01, 2002 | Sheet 1 of 1 |