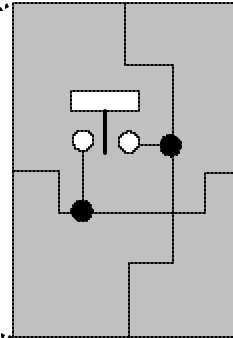
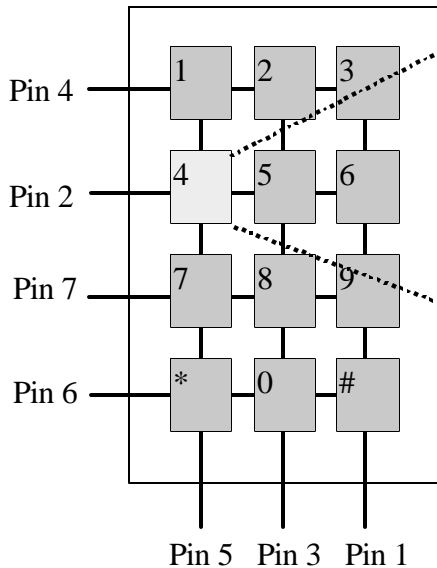




EEL 4744

Keypad



- Most keypads work the same way
 - > Only the pin numbers vary
 - > Many ways to solve the keypad problem

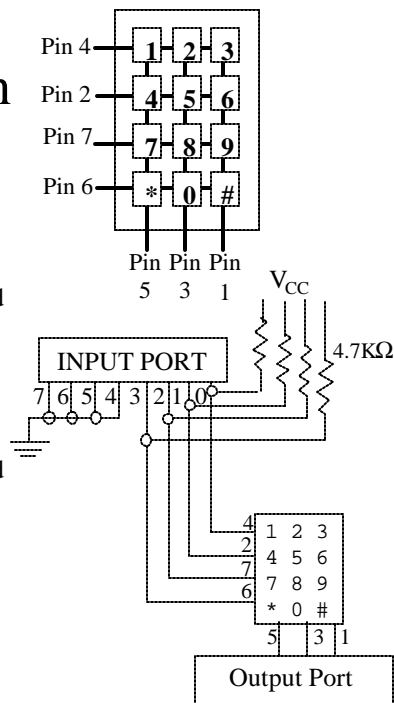
University of Florida, EEL 4744 – File #??
© Dr. Schwartz

1



EEL 4744 Keypad Discussion

- The row (column) wires are pulled-up
- Search for a key a column at a time
 - > Output a low to pin 5 (high to pins 3 & 1) and test keys in first column (pins 4, 2, 7, 6)
 - If pin 4 reads low, then key 1 was pressed
 - If pin 2 reads low, then key 4 was pressed, etc.
 - If none of the pins is low, go on
 - > Output low to pin 3 (pins 5 & 1 high)
 - > If a key is pressed, set the strobe for one cycle only and wait for the key to be released before scanning for the next key
- Remember that you **must** wait for a pressed key to be released to move on



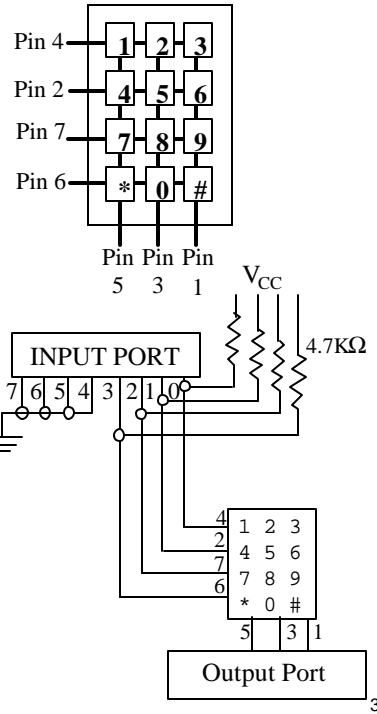
University of Florida, EEL 4744 – File #??
© Dr. Schwartz

2



EEL 4744 Keypad Discussion

- Another technique (that I don't like much)
 - > Search for each key, stepping through the keys:
 - Is the 1 pressed? If so, indicate the 1 is pressed and then wait until it is not pressed; otherwise, check the next key.
 - Is the 2 pressed? If so, indicate the 2 is pressed, ...
 - etc.



University of Florida, EEL 4744 – File #??
© Dr. Schwartz



EEL 4744

The End!

University of Florida, EEL 4744 – File #??
© Dr. Schwartz



EEL 4744

