

Reversible Variable Rate LED
with ability to do direction change

Reversible Variable Rate either Direction

- This lesson combines using the button to reverse the direction of rotation when the button is pressed and adjusting the potentiometer to control the speed of rotation.
- The program needs to keep track of carry during rotation and rotation direction.
- Code needs is added to rotate in either direction.
- The example using dual interrupts
 - One for the ADC conversion of pot value
 - The other for detection of RB0 pushbutton

Exercise

1. Navigate to: C:\EET250\CS2117 course\Lesson 12 Variable Rate Variable Direction LED with Demo Board\vratedirection
2. Hook up demo board to PICKIT2
3. Open vratedirection.mcp
4. Examine ISR. Notice that it services two interrupts (one at a time) by checking XXIF FLAGS for service request
5. Select debugger -> PICKIT2
6. Verify output window indicates PICKIT2 ready
7. Build/Program/Download
8. Verify operation for variable rotate by changing pot setting
9. Verify operation for direction change by using pushbutton