

list3.txt

```

// change pulse output pin
//ホールセンサの位置に合わせたPWM出力
// 前進後退
// 全域、前半チョッピング
void pulseOutput(void) {
    int hall;

    hall = 0; // check hall sensor state
    hall = digitalRead(Hw);
    hall |= digitalRead(Hv) << 1;
    hall |= digitalRead(Hu) << 2;
    hall &= 0x07;

    // set PWM
    switch (dir) { //check direction SW
        case 0:
            switch (hall) {
                case 1: //Wp(PWM)->Vn(ON)
                    UpPin = OUT_L; //Up GTIOC2B D5
                    UnPin = OUT_H; //Un GTIOC2A D4
                    VpPin = OUT_L; //Vp GTIOC3B D10
                    WnPin = OUT_H; //Wn GTIOC7A D8
                    WpPin = OUT_PWM; //Wp GTIOC7B
                    VnPin = OUT_L; //Vn=L
                    break;
                case 5: //Wp(H)->Un(PWM)
                    UpPin = OUT_L; //Up GTIOC2B D5
                    VpPin = OUT_L; //Vp GTIOC3B D10
                    VnPin = OUT_H; //Vn GTIOC3A D13
                    WnPin = OUT_H; //Wn GTIOC7A D8
                    UnPin = OUT_PWM; //Un GTIOC2A
                    WpPin = OUT_H; //Wp=H
                    break;
                case 4: //Vp(PWM)->Un(ON)
                    UpPin = OUT_L; //Up GTIOC2B D5
                    VnPin = OUT_H; //Vn GTIOC3A D13
                    WpPin = OUT_L; //Wp GTIOC7B D9
                    WnPin = OUT_H; //Wn GTIOC7A D8
                    VpPin = OUT_PWM; //Vp GTIOC3B
                    UnPin = OUT_L; //Un=L
                    break;
                case 6: //Vp(ON)->Wn(PWM)
                    UpPin = OUT_L; //Up GTIOC2B D5
                    UnPin = OUT_H; //Un GTIOC2A D4
                    VnPin = OUT_H; //Vn GTIOC3A D13
                    WpPin = OUT_L; //Wp GTIOC7B D9
                    WnPin = OUT_PWM; //Wn GTIOC7A
                    VpPin = OUT_H; //Vp=H
                    break;
                case 2: //Up(PWM)->Wn(ON)
                    UnPin = OUT_H; //Un GTIOC2A D4
                    VpPin = OUT_L; //Vp GTIOC3B D10
                    VnPin = OUT_H; //Vn GTIOC3A D13
                    WpPin = OUT_L; //Wp GTIOC7B D9
                    UpPin = OUT_PWM; //Up GTIOC2B
                    WnPin = OUT_L; //Wn=L
                    break;
                case 3: //Up(ON)->Vn(PWM)
                    UnPin = OUT_H; //Un GTIOC2A D4
                    VpPin = OUT_L; //Vp GTIOC3B D10
                    WpPin = OUT_L; //Wp GTIOC7B D9
                    WnPin = OUT_H; //Wn GTIOC7A D8
                    VnPin = OUT_PWM; //Vn GTIOC3A
                    UpPin = OUT_H; //Up=H
                    break;
                default: //pattern 0 and 7
                    break;
            }
        break;
        case 1:
            switch (hall) {
                case 1: //Wn(PWM)->Vp(ON)
                    UpPin = OUT_L; //Up GTIOC2B D5
                    UnPin = OUT_H; //Un GTIOC2A D4
                    VnPin = OUT_H; //Vn GTIOC3A D13
                    WpPin = OUT_L; //Wp GTIOC7B D9
                    WnPin = OUT_PWM; //Wn GTIOC7A
                    VpPin = OUT_H; //Vp=H
                    break;
                case 5: //Up(PWM)->Wn(ON)
                    UnPin = OUT_H; //Un GTIOC2A D4
                    VpPin = OUT_L; //Vp GTIOC3B D10
                    VnPin = OUT_H; //Vn GTIOC3A D13
                    WpPin = OUT_L; //Wp GTIOC7B D9
                    UpPin = OUT_PWM; //Up GTIOC2B
                    WnPin = OUT_L; //Wn=L
                    break;
                case 4: //Up(ON)->Vn(PWM)

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```
UnPin = OUT_H; //Un GTI0C2A D4
VpPin = OUT_L; //Vp GTI0C3B D10
WpPin = OUT_L; //Wp GTI0C7B D9
WnPin = OUT_H; //Wn GTI0C7A D8
VnPin = OUT_PWM; //Vn GTI0C3A
UpPin = OUT_H; //Up=H
break;
case 6: //Wp (PWM) -> Vn (ON)
UpPin = OUT_L; //Up GTI0C2B D5
UnPin = OUT_H; //Un GTI0C2A D4
VpPin = OUT_L; //Vp GTI0C3B D10
WnPin = OUT_H; //Wn GTI0C7A D8
WpPin = OUT_PWM; //Wp GTI0C7B
VnPin = OUT_L; //Vn=L
break;
case 2: //Wp (ON) -> Un (PWM)
UpPin = OUT_L; //Up GTI0C2B D5
VpPin = OUT_L; //Vp GTI0C3B D10
VnPin = OUT_H; //Vn GTI0C3A D13
WnPin = OUT_H; //Wn GTI0C7A D8
UnPin = OUT_PWM; //Un GTI0C2A
WpPin = OUT_H; //Wp=H
break;
case 3: //Vp (PWM) -> Un (ON)
UpPin = OUT_L; //Up GTI0C2B D5
VnPin = OUT_H; //Vn GTI0C3A D13
WpPin = OUT_L; //Wp GTI0C7B D9
WnPin = OUT_H; //Wn GTI0C7A D8
VpPin = OUT_PWM; //Vp GTI0C3B
UnPin = OUT_L; //Un=L
break;
default:
break;
}
default:
break;
}
pre_hall = hall;
```