



A sensed example for HV PMSM Delfino F2833x was not created, but it's relatively simple to add this support thanks to the Incremental Build process, DMCLib, and the sensed example done for Piccolo.

You will want to review the Piccolo documentation for Sensed PMSM at*
C:\ti\controlSUITE\development_kits\HVMotorCtrl+PfcKit_v1.3\HVPM_Sensed
*or latest _vX.X\

Specifically the use of the following code found in HVPM_Sensed.c for calibrating the QEP for precise **angle** detection (QEP is only used for verifying speed detection in the sensorless build levels). This is explained in the documentation under section "Level 3B".

```
// -----  
// Detect calibration angle (optional) and call the QEP module  
// -----  
    if (lsw==0) {EQep1Regs.QPOSCNT=0; EQep1Regs.QCLR.bit.IEL = 1;} // Reset  
position cnt.  
  
    if ((EQep1Regs.QFLG.bit.IEL==1) && Init_IFlag==0) // Check the first  
index occurrence  
        {qep1.CalibratedAngle= EQep1Regs.QPOSILAT; Init_IFlag++;} // Keep the  
latched position  
  
    if (lsw!=0) QEP_MACRO(qep1);
```

You can modify the Delfino HVPM_Sensorless.c project by replacing any instances of

```
// -----  
// Call the QEP calculation module  
// -----  
    QEP_MACRO(qep1);
```

With the Calibration code above, and running the code through Build Level 5 only.