

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

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

Specifically, for sensored operation the phase voltage and ACI motor models are no longer required, so the following code sections in HVACI_Sensoreless.c are not required. This is explained in the Piccolo Sensored ACI document under section "Level 3".

```
// -----
// Connect inputs of the VOLT_CALC module and call the phase voltage calc. macro
// -----
    volt1.DcBusVolt = IQ15toIQ((AdcResult.ADCRESULT2<<3)); // DC Bus
voltage meas.
 volt1.MfuncV1 = svgen_dq1.Ta;
 volt1.MfuncV2 = svgen dq1.Tb;
 volt1.MfuncV3 = svgen_dq1.Tc;
 VOLT MACRO(volt1)
// -----
// Connect inputs of the ACI module and call the flux estimation macro
// -----
    fe1.UDsS = volt1.Valpha;
    fe1.UQsS = volt1.Vbeta;
    fe1.IDsS = clarke1.Alpha;
    fe1.IQsS = clarke1.Beta;
    ACIFE MACRO(fe1)
// ______
// Connect inputs of the ACI module and call the speed estimation macro
// -----
    se1.IDsS = clarke1.Alpha;
    se1.IQsS = clarke1.Beta;
    se1.PsiDrS = fe1.PsiDrS;
    se1.PsiQrS = fe1.PsiQrS;
    se1.ThetaFlux = fe1.ThetaFlux;
    ACISE_MACRO(se1)
```



They can be deleted completely from Build 2 and 3, and replaced in Build 4, 5 and 6 with one instance of the following to derive the needed current information

```
// ------
// Connect inputs of the CUR_MOD module and call the current model
// calculation function.
// ------
cm1.IDs = park1.Ds;
cm1.IQs = park1.Qs;
cm1.Wr = speed1.Speed;
CUR_MOD_MACRO(cm1)
```