Scale Factor Optimization (SFO) V6 Library Errata

1 Introduction

This document describes the updates to the Scale Factor Optimization (SFO) V6 library files packaged with the C/C++ Header Files and Peripheral Examples software package.

The updates are applicable to the following files:

- SFO_TI_Build_V6x.lib (where "x" represents the alphabetical revision letter of the library).
- SFO_V6.h

2 Library Change Overview

Table 1 lists the change(s) made to each library revision.

Table 1. SFO Library V6 Change Overview

REVISION	CHANGES MADE
0	Original library release
b	**Changes:** Library re-released as SFO_TI_Build_V6b.lib **Errors Fixed:** The SFO_V6() function now properly updates the HRMSTEP register with MEP_ScaleFactor after calibration is complete.

3 Known Advisories in Library Versions

Table 2 lists the known advisories in early library revisions and workarounds required in user code to account for these errors.

Table 2. SFO V6 Library Advisories in Early Software Revisions

Advisory	**HRMSTEP Register not Updated with calculated MEP_ScaleFactor**
Revision(s) Affected	0
Details	The library function, SFO_V6(), does not properly update the HRMSTEP register with the newly calculated MEP_ScaleFactor value after SFO_COMPLETE status has been reached.

Workaround	After SFO_COMPLETE status has been reached on a call to SFO_V6(), user must manually update the HRMSTEP register with the newly calculated MEP_ScaleFactor Value.
	
	Example:
	`if (SFO_V6(n)==SFO_COMPLETE) {`
	`  EALLOW;`
	`  EPwm1Regs.HRMSTEP = MEP_ScaleFactor;`
	`  EDIS;`
	`}`