

3. (5) Use your favorite Internet resources to determine what relevance the "Thumb" instruction set has to ARM processors such as the Cortex-M4. What makes Thumb instructions special?

Thumb instructions are only 16 bits, but decompress into full 32-bit ARM instructions without performance loss.

4. (5) What file in the "Lab Materials" module on Canvas contains an assembly language reference? How many pages is it?

Cortex-M4 ISA.pdf

169 pages

5. (5) What kind of information is contained in the Tiva Data Sheet (called the "Tiva Manual" on Canvas)?

info for the TM4C123CH6PM microcontroller, describing the functional blocks of the system-on-chip device around the ARM cortex-M4F core.

6. (3) From the Tiva Reference Manual, find the **Revision History** section and then indicate the most recent revision date, the revision number and at least one change that was made in this newest version.

June 2014 15842.2741

In times chapter, removed erroneous references to TCACT bit field

7. (16) Label what each arrow in Figure 1 points to on the Tiva C board. There are 14 arrows.