AmP Demonstration Board

AmP8DB2

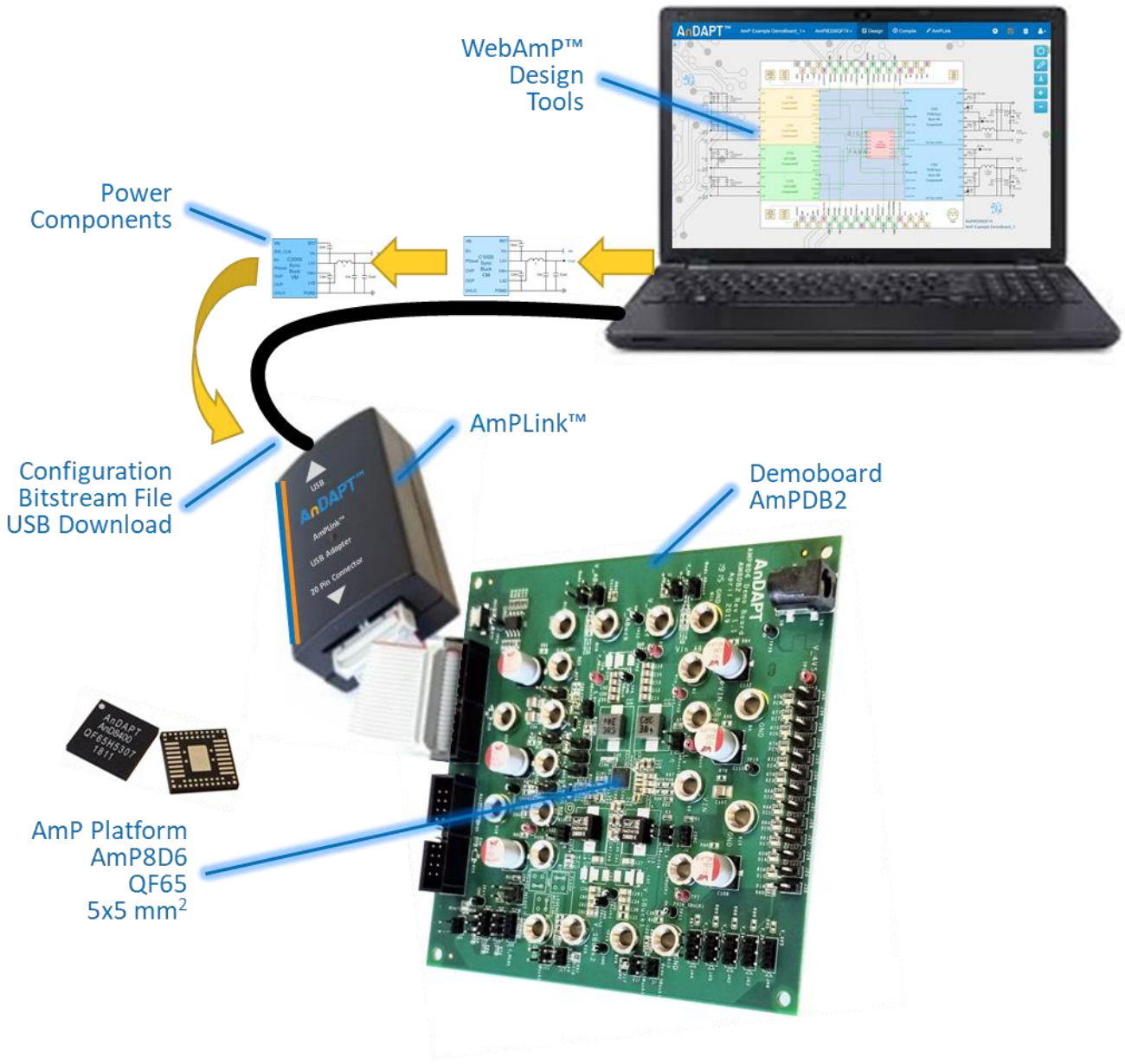
Features

- AmP8DS6QF65 platform 5x5 mm^2 package on board
- Demonstrates Power Components:
  - Synchronous Buck
  - Asynchronous Buck
  - Asynchronous Boost
  - LDO
  - Load Switch
  - Supervisor Functions
- Connects to AmPLink™ USB adapter
- WebAmP Tool Downloads Configuration File
  - .HEX file (Intel HEX) to program on board Flash
  - .HAX file to configure AmP device directly

Description

The AmP8DB2 is a ready to use Demonstration Board to evaluate Power Components on the AmP, Adaptive Multi-Rail Power Platform. Simply drag and drop Power Components in the WebAmP design tool https://webamp.andapt.com and compile into a Configuration Bitstream File. In the AmPLink Control tab, download the file over the AmPLink USB adapter to the AmP8DB2 Demonstration Board. The .HEX file is used to download to the Flash memory or the .HAX file is used to download directly to the AmP Platform. Synchronous Buck, Async Buck, Async Boost, LDO, Load Switch and Supervisor Power Components may then be evaluated.

Application of Demonstration Board



Getting Started

Step 1.
Set jumper connections to the default configurations as highlighted in green below. Also provided for clarity is a jumper legend on the PCB silkscreen.
For details see:
AmPLink Configuration and Control

Function	Header	Jumper	Operation
Chip Select	J20	2-4	AmPLink to AmP
		1-3	AmPLink to FLASH
		1-2	FLASH to AmP*
Mode	J29	1-2	AmP is MASTER*
		2-3	AmP is SLAVE

*for FLASH to AmP, use AmP is MASTER

Step 2.
Connect power supplies to Vin, Sync Buck1 PVin and GND banana plugs as shown in the figure below. In this example, use Vin = PVIN = 12V.

Step 3.
Load WebAmP project, AmP8DB2 Buck x1.json, from the Example projects folder, and compile. Connect AmPLink USB cable to computer and AmPLink 20-pin flat ribbon cable to J18 as shown on page 1. From the AmPLink tab, install AmPlink drivers if required, then click Program & Verify. Observe 1.2V on the Vout bananna plug below.
See: Video - Using AmPLink

Power Supply and Jumper Configurations