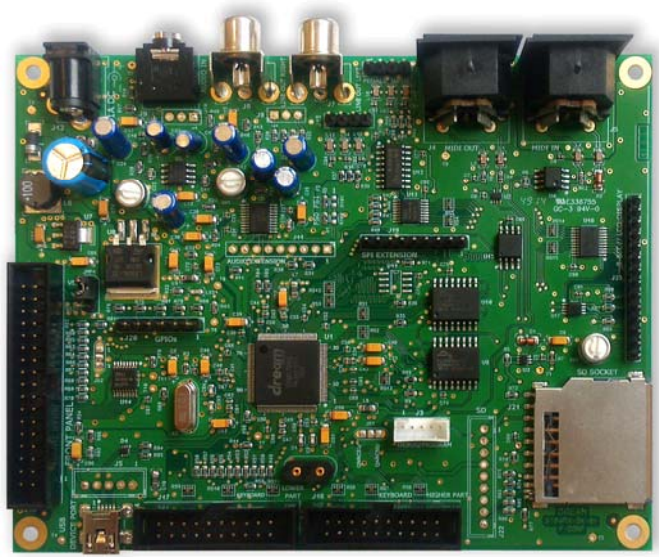
5704PIA-C-PDK Product Development Kit

5704PIA-C-PDK is a Product Development Kit for digital piano applications, based on member of DREAM SAM5000 series IC's, the SAM5704 chip. It includes an evaluation/development board 5704PIA-DK, an example panel board (5700PIFP-DK), the development software (SamVS-C) with complete firmware example, which can be used as it is or adapted to requested specifications, and MIDI Control tools.

5704PIA-DK example firmware offers the following main features:

- 8 sounds selectable from panel (16MByte piano sound)
- GM sound bank 8MByte
- 81 voices max with effects, 32 parts
- 4 Reverb+ 3 Chorus
- 4 Dynamic curves (Soft, Normal, Hard, Fixed)
- 3 Demo songs
- Metronome (8 signatures) with volume
- 4-track, 3-song sequencer
- 8 Registrations
- 3 pedals (4-level damper)
- 7 Temperaments with Root note setting
- Style Player
  - o 14 styles with variation
  - o Intro/Ending, Start/Stop, Rhythm Only
  - o Easy Chord mode
- Tune, Transpose
- SD Card (Read, Save, Load SMF0)
- USB MIDI (to host)
- Firmware and sound bank update through USB MIDI



5704PIA-DK Piano Board

5700PIFP-DK Front Panel

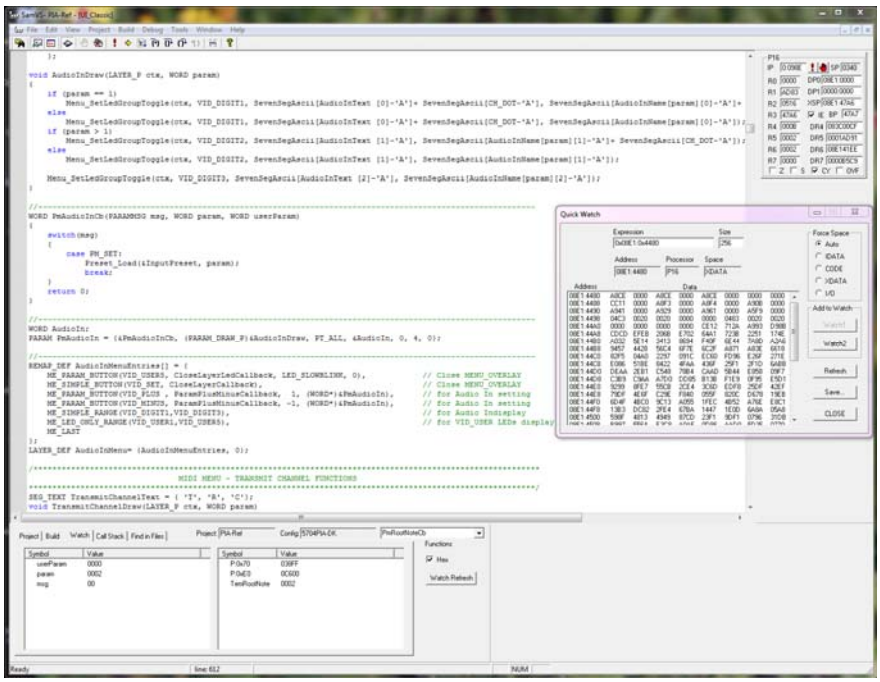
5704PIA-DK board can be run in two modes

Stand Alone Mode:
Connect a standard piano keyboard and the 5700PIFP-DK Front panel to the 5704PIA-DK board to get the Dream example piano product.
In this mode you can also download your own sounds in the 2x256Mbit QSPI flash memory.

Debug Mode:
Create your own piano product from the Dream example.
Connect the 5704PIA-DK board to PC with the 5000DBG-IF interface. Edit and debug your code with SamVS-C software.

5000DBG-IF Debug Interface

Win XP/Vista/7/8/10 development tools



SamVS-C

SAMVS-C is an integrated development environment with C-Complier, with following new features:

- Project oriented (multi file compilation)
- C-/Assembler source level debugging with go, step into, step out, run to cursor, run to breakpoint etc.
- Programming errors can be easily found by double click on compiler output messages
- Library based/ DREAM provide ready to use libraries like MIDI and Effects
- A system library allows complete access to all low level IC potions like I/O ports

5704PIA Control

5704PIA Control is a MIDI controller made of graphical tools for real time edition of parameters (effects, PEQ, Velocity curves, Temperaments, Program definition,…)