# **Software Synthesizer Library**

bismark LLC http://www.bismark.jp

## **Overview**

## 1. Sound Library

- Support SF2 (SoundFont) and DLS (Downloadable Sounds)
- Provide Various Sets (Including GM, ...)

### 2. Synthesizer Engine Library

- High Portability
- Light Processing with Original Algorithm

### 3. MIDI Player Library

- □ Provide Player APIs
- Support Various OS, Platforms, and File Formats
- Key / Tempo / Guide Melody Control

### 4. MIDI Driver Library

- Provide Real-time MIDI APIs
- Support Various OS and Platforms

## **1. Sound Library**

## Support SF2 (SoundFont) and DLS (Downloadable Sounds)

- De facto Standard Format for Wave Table Synthesizer
- Provide Various Wave Table Library Sets for Demanded Spec.
  - □ GM (General MIDI)
  - □ GS (Roland SC-55, SC-88) Compatible
  - Additional Customized Presets

## 2. Synthesizer Engine Library

## High Portability

Independent from OS/CPU/Platforms

## Module System

□ GM (General MIDI), GS (Roland), ...

### Support Various Targets

- Light Processing > for Embedded (Mobile Phone /Smart Phone)
- High Quality > for Professional KARAOKE / Software Instruments

## Internal Effects

- □ Reverb
- Chorus
- Delay
- □ *EQ*

## **3. MIDI Player Library**

#### Provide MIDI File Player API

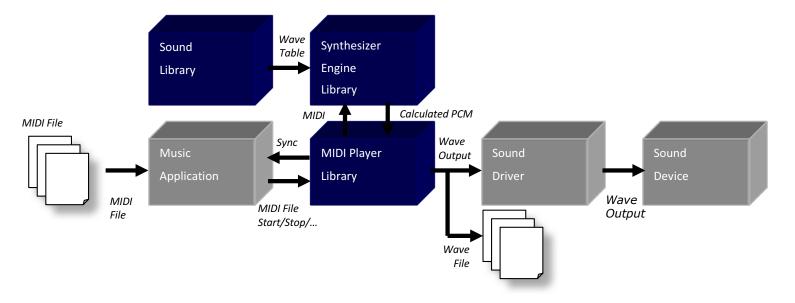
- Easy to Construct Player/KARAOKE Applications
- □ Provide Time Synchronization Method for Lyric, etc.
- Support Key / Tempo / Guide Melody Control
- Sample Accurate MIDI Rendering
- Can be used as MIDI to Wave File Converter

#### Support Various OS and Platforms

□ iOS, Android, Windows, Linux, ...

#### Support Various Standard Formats

SMF, MIDI Triggered Wav / AIFF / MPEG / ADPCM Playback (Option), ...





KY/Keumyoung (South Korea) Professional Karaoke Commander KG LiVEN (KMS-S100)

## 4. MIDI Driver Library

#### Provide Real-time MIDI API

- Replace Hardware MIDI Sound Module
- Easy to Construct Virtual Instrument, MIDI Sequencer
- □ Includes MIDI File Player

#### Support Various OS and Platforms

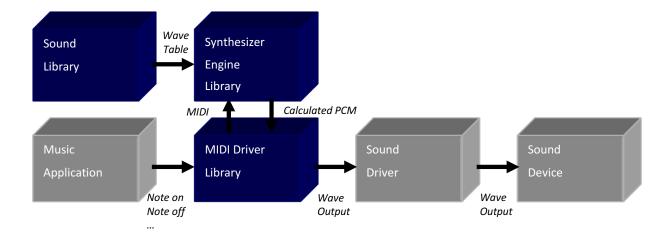
□ iOS, Android, Windows, Linux, ...

#### Support Standard Format

□ SMF

#### Low-Latency Solution

Support Audio Unit (iOS) / Steinberg ASIO (Windows PC)





**bismark bs-16i** Available iOS AppStore

## And More...

### MIDI Authoring Environment

- Various File Converters are Available
- Support Software Instrument Plug-In
  - Steinberg / VST, Apple / Audio Units

### Customization

- Porting to Specified OS and Platforms
- Add Various Algorithm and Effects
- Add New File Format

#### Contact:

#### bismark LLC

Web: http://www.bismark.jp Facebook: http://www.facebook/bismark.jp Twitter: @\_bismark