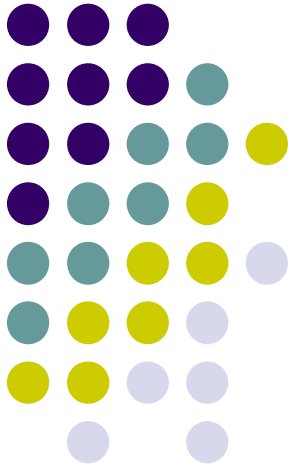
Janus Audio System Application Guide

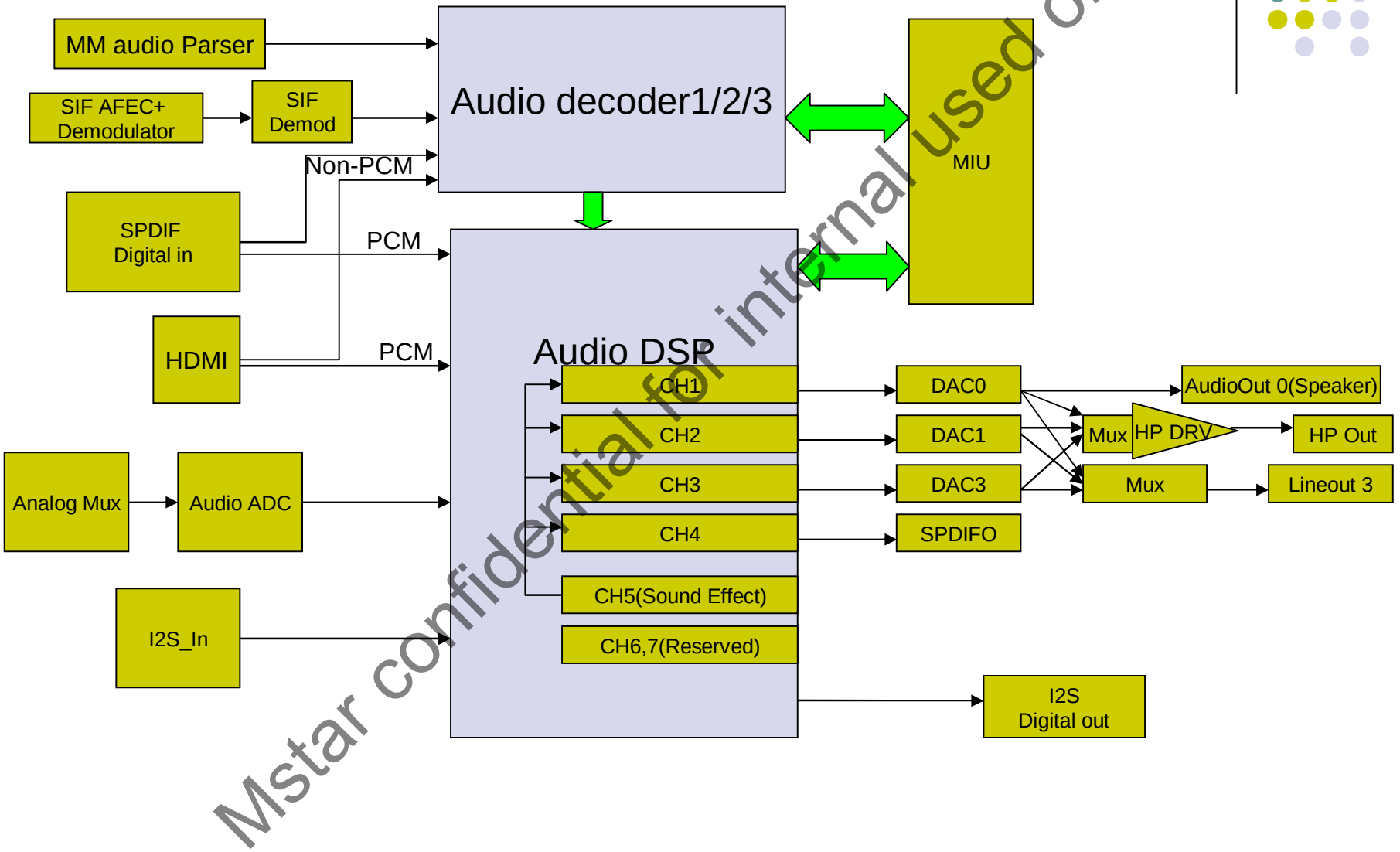


Mstar SZ office Release

Confidential

2010-02-23

Audio Block



Feature List

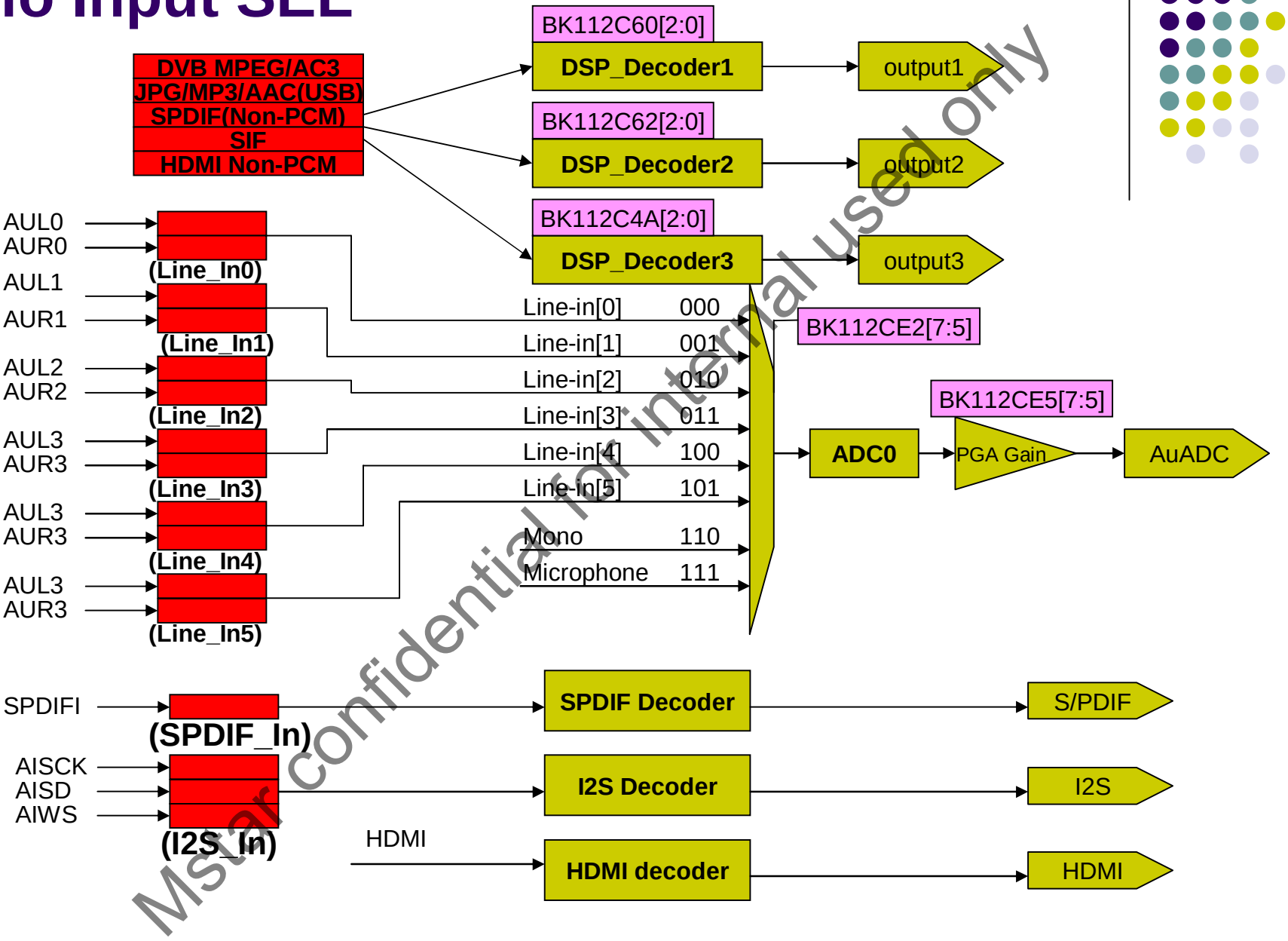
- **Supports BTSC/A2/EIA-J demodulation in NTSC and A2/NICAM/FM/AM demodulation in PAL**
- **Supports MTS Mono/Stereo/SAP in BTSC/EIA-J and Mono/Stereo/Dual in A2/NICAM**
- **Optional advanced sound available (Dolby, SRS, BBE, Q-Sound… etc)**
- **Support digital audio format decoding:**
  - MPEG-1, MPEG-2 (Layer I/II), MP3, AC-3 Plus (Dolby Digital Plus), WMA PRO
  - AAC, RA8 LBR, FLAC, XPCM
- **Input Interface**

  Stereo (L/R) Line-in x 6 (216pin 6M48 only used 5)
  Stereo (L/R) audio ADC x 1
  I2S input x 1
  HDMI Rx for both PCM and non-PCM format
- **Output Interface**

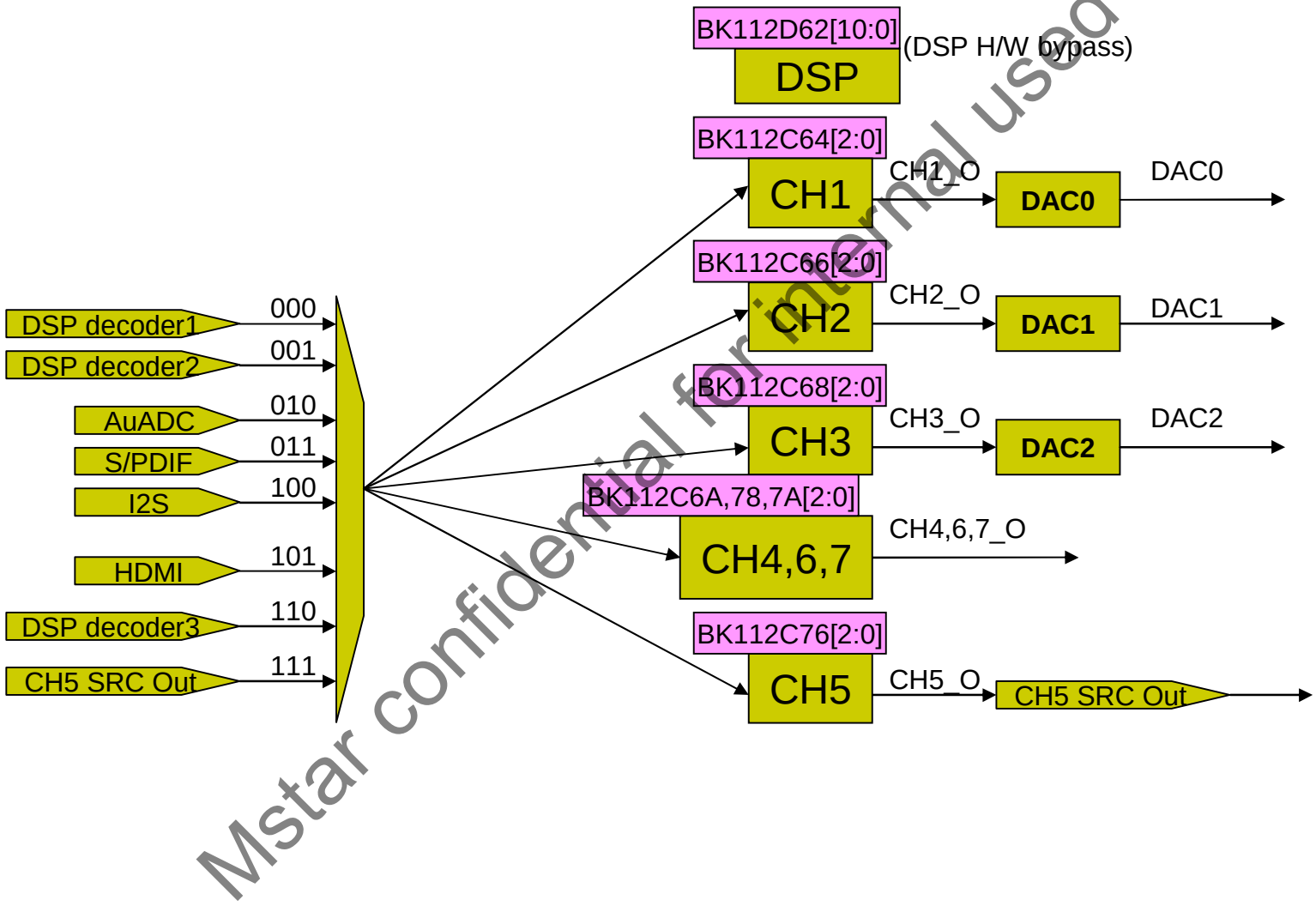
  Stereo (L/R) audio DAC x 3
  - 2 stereo analog audio output
  - 1 stereo headphone drive DAC output

  SPDIF x 1 digital output (60958 or 61937 format)
  Master I2S x 1

Audio Input SEL

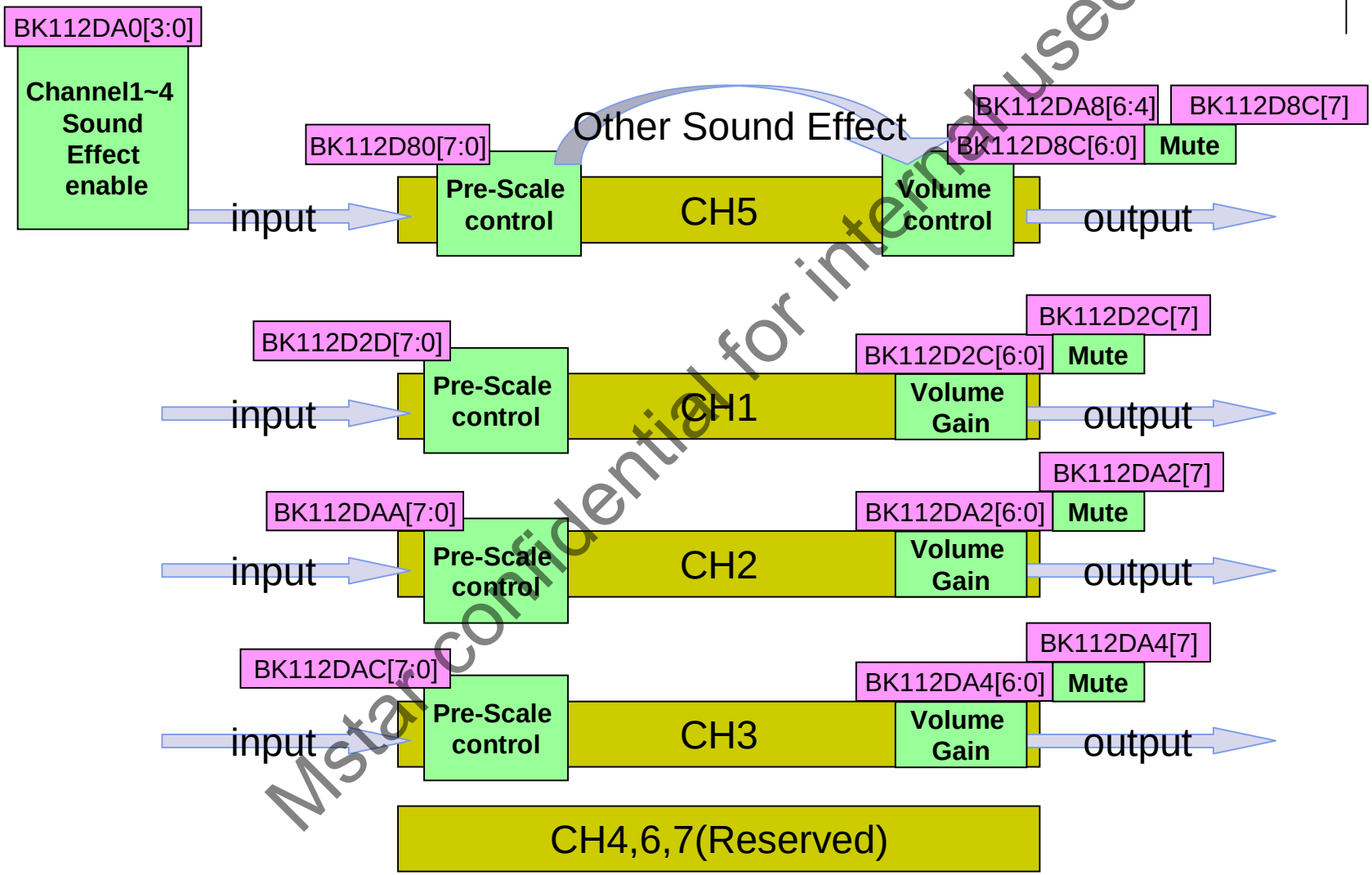


Audio Channel Process

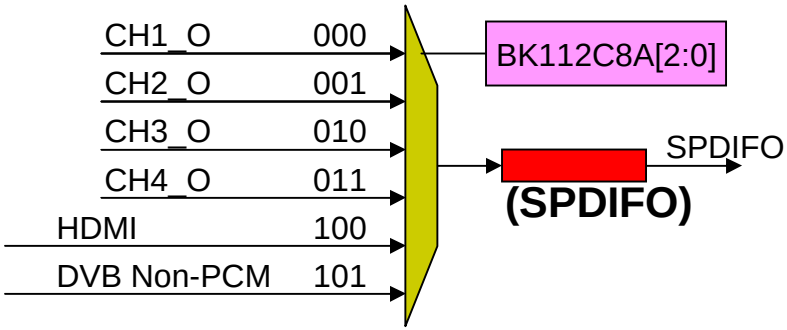


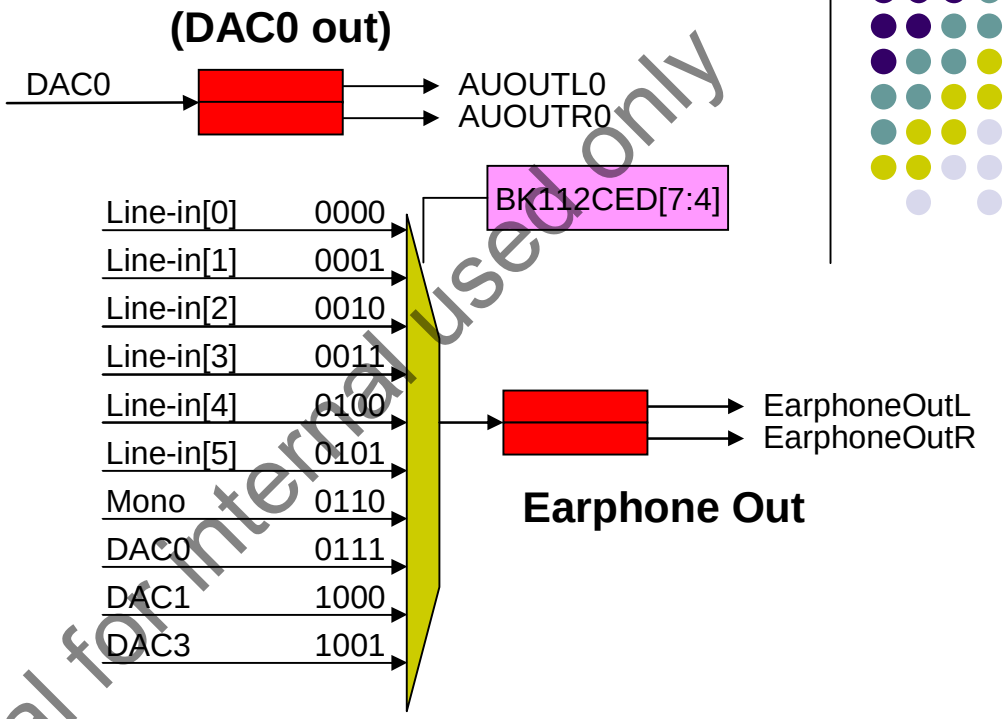
Channel volume control

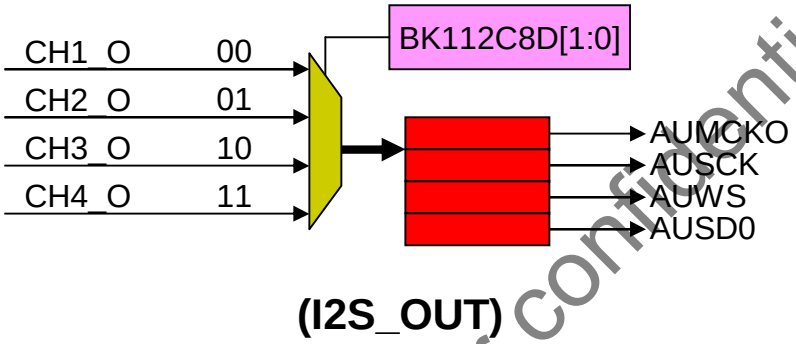
- 8 bit pre-scale control,0.125db per step
- 10 bit volume gain(7bit coarse tune, 3bit fraction tune)

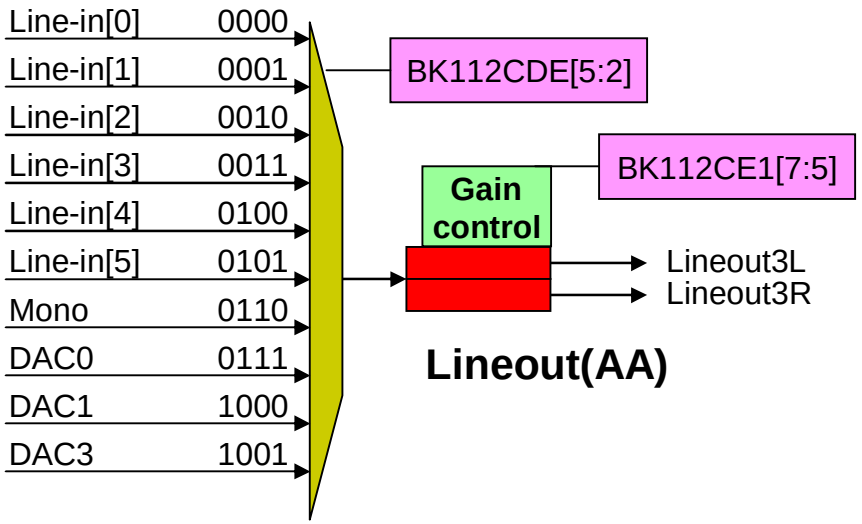


Audio Pin Out

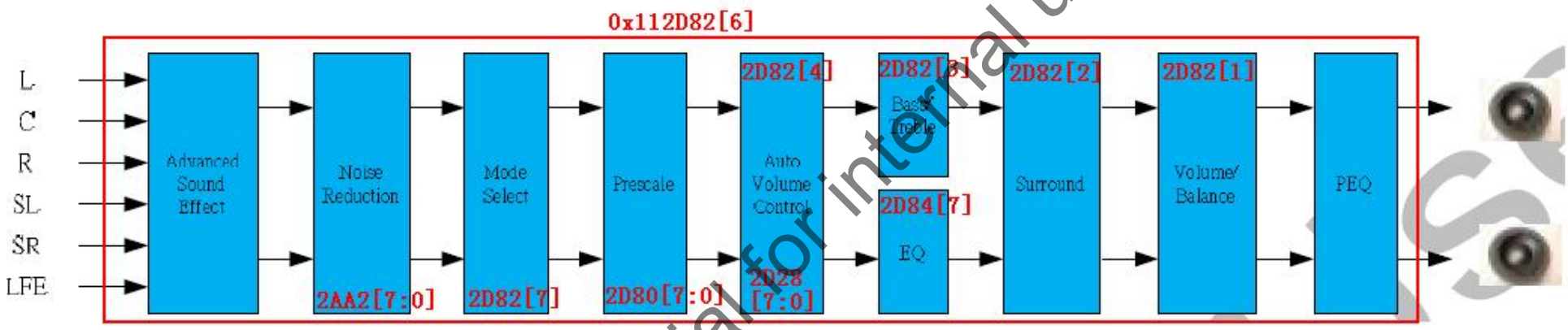




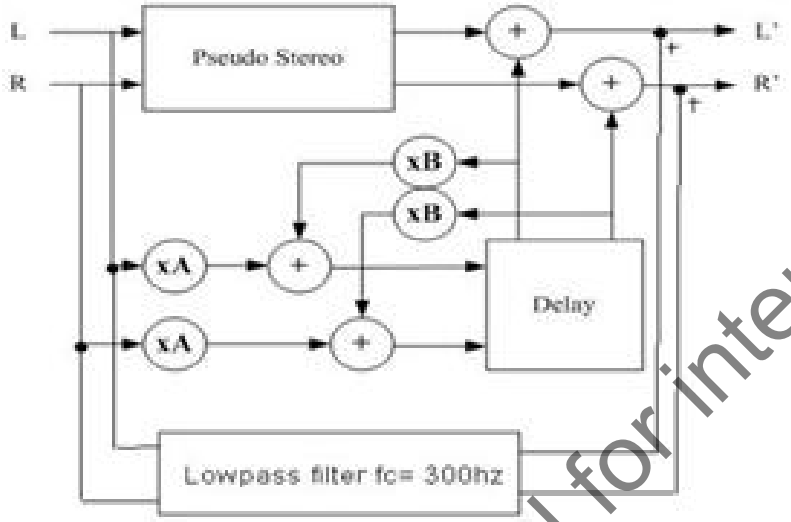




CH5 Sound Effect



Mstar Surround introduction



APIAudio.h to set xA, xB, xk & LPF gain value

xA : Para. xA
00: 0.1
01: 0.15
10: 0.2
11: 0.25

xB : Para.xB
00: 0.25
01: 0.3
10: 0.35
11: 0.45

xK : Surround pure gain
00: 0.1
01: 0.2
10: 0.3
11: 0.4

Surround LPF (fc = 300 Hz) compensate Gain :
00: 0 dB
01: 2 dB
10: 4 dB
11: un - support

Audio NR:

Enable NR的方法

- AUDIO NR：0X2AA2从00慢慢往上加，加到刚好起作用后，再加5左右即可(audio NR要等一会才会起作用).