

Expat Audio Library Requirements

Version 1.0 1/21/16

Dafydd Roche

The Goal...

Control Panel - EAGLE 5.11.0 Professional

File View Options Window Help

Name	Description
EA-pcm186x-v1p1.lbr	PCM186x 2 or 4ch ...
PCM1860	Texas Instruments
PCM1861	Texas Instruments
PCM1862-I2C	Texas Instruments
PCM1862-SPI	Texas Instruments
PCM1863-I2C	Texas Instruments
PCM1863-SPI	Texas Instruments
PCM1864-I2C	Texas Instruments
PCM1864-SPI	Texas Instruments
PCM1865-I2C	Texas Instruments
PCM1865-SPI	Texas Instruments
TSSOP30	Thin Shrink Small ...
EA-PCM510x.lbr	
EA-PCM1681.lbr	
EA-PCM1808.lbr	
EA-PCM2912A.lbr	
EA-PGVERSION.lbr	
EA-Pinheaders.lbr	
EA-PMN25UN FET.lbr	
ea-pot for front panel.lbr	
ea-power-regulators.lbr	
EA-RCA Connectors.lbr	
EA-RobotPajamaParty.lbr	
EA-SMPS-Inductors.lbr	
EA-Standard-Passives New.lbr	
EA-Toshiba spdif.lbr	
EA-Transistors.lbr	
EA-Trimmmers.lbr	


PCM1862-I2C

Texas Instruments

PCM186x 103 dB 2ch S/W Controlled Audio ADC
With Universal Front End

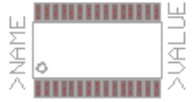
Source: Texas Instruments - [Data sheet](#)

Created by: [mochini77](#)



P\$01	VIN L2/VIN1B	VIN R3/VIN3P	P\$09
P\$02	VIN R2/VIN2B	VIN L3/VIN4P	P\$08
P\$03	VIN L1/VIN1P	VIN R4/VIN3M	P\$07
P\$04	VIN R1/VIN2P	VIN L4/VIN4M	P\$06
P\$05	MIC_BIAS	MDD	P\$05
P\$06	VREF	AD	P\$04
P\$07	AGND	GCL	P\$03
P\$08	AVDD	SDA	P\$02
P\$09	XO	GPIO0	P\$01
P\$10	XI	GPIO1/INTA/D MIN	P\$00
P\$11	LDO	GPIO2/INTB/D MCLK	P\$19
P\$12	DGND	GPIO3/INTC	P\$18
P\$13	DVDD	DO UT	P\$17
P\$14	IDVDD	BC K	P\$16
P\$15	GC K(3.3V)	LRC K	

>NAME
>VALUE



**Thin Shrink Small Outline Plastic 30 (TSSOP30)
Footprint for the PCM186x ADC.**

Texas Instruments DBT Package
<http://www.ti.com/lit/ml/mpds309a/mpds309a.pdf>

JEDEC Standard MO-153
<https://www.jedec.org/sites/default/files/docs/MO-153f.pdf>

Created From
Insert Link Here for datasheet/tool

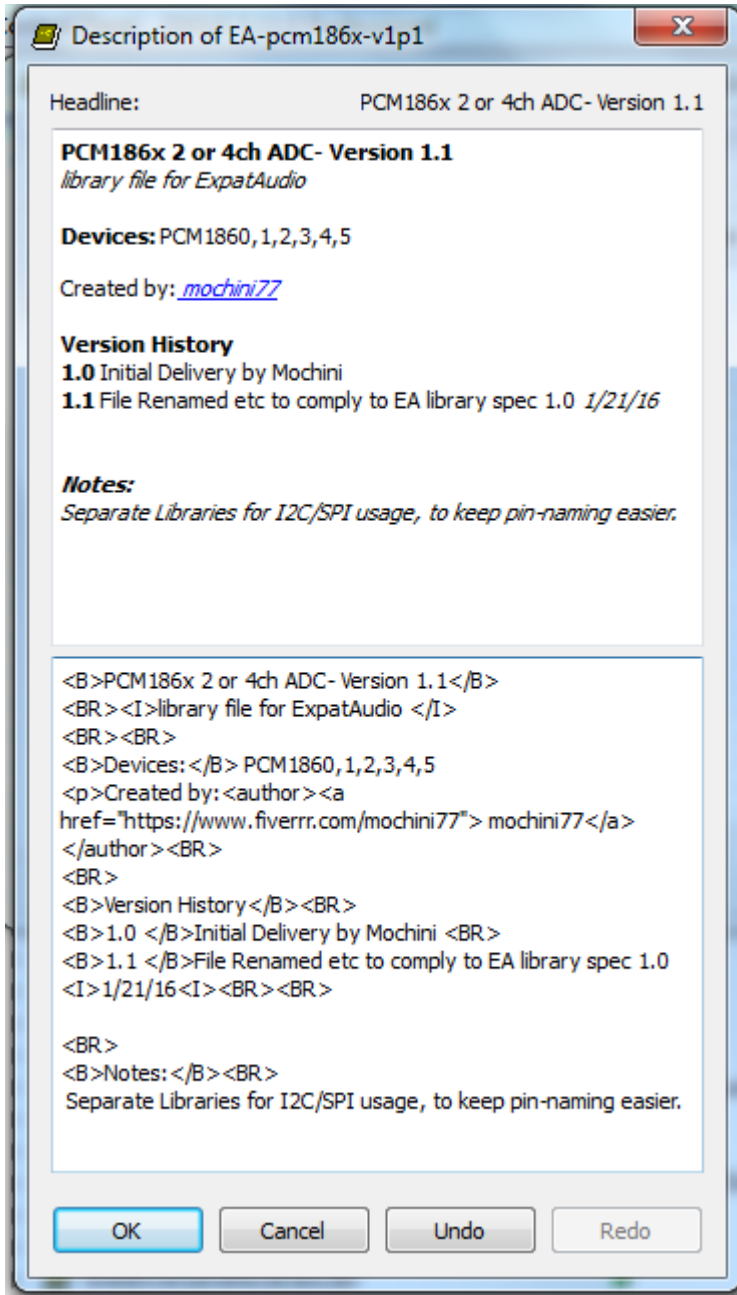
Device	Package	Description
PCM1862-I2CDBT	TSSOP30	Thin Shrink Small Outline Plastic 30 (TSSOP30)

Links to datasheets and data sources for the creation of the library.

File Name

- **EA-PartNumber-V1p0.lbr**
 - EA is used to show it's a custom made for us
 - Part Number
 - V1p0 = Version 1.0
 - V1p1 = Version 1.1

Library Description



- **Library Description**
- *library file for ExpatAudio*
- **Devices:**
- Created by: mochini77
- **Version History**
- **1.0** Initial Delivery by Mochini
- **1.1** Added descriptions, and added holes for plastic pins on footprint *DATE*
- **NOTES:**

Foot Print Name

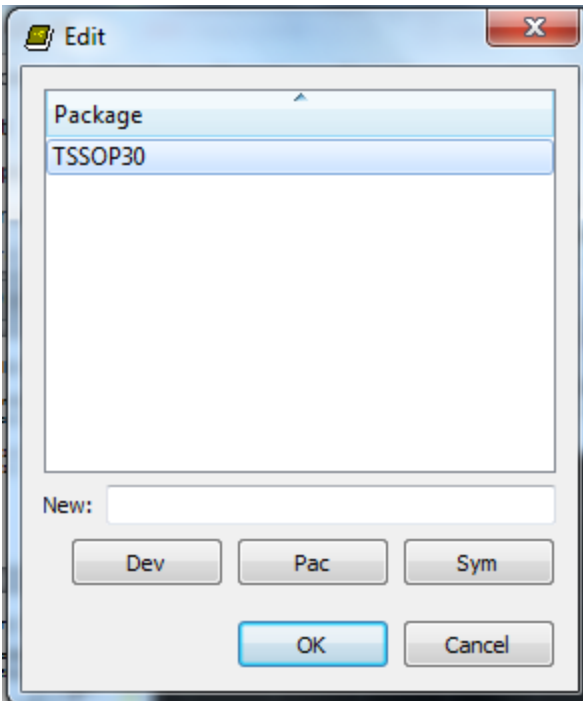
- Footprint name should be supplier package suffix

TPA3250D2DDW <- Footprint name shall be DDW.

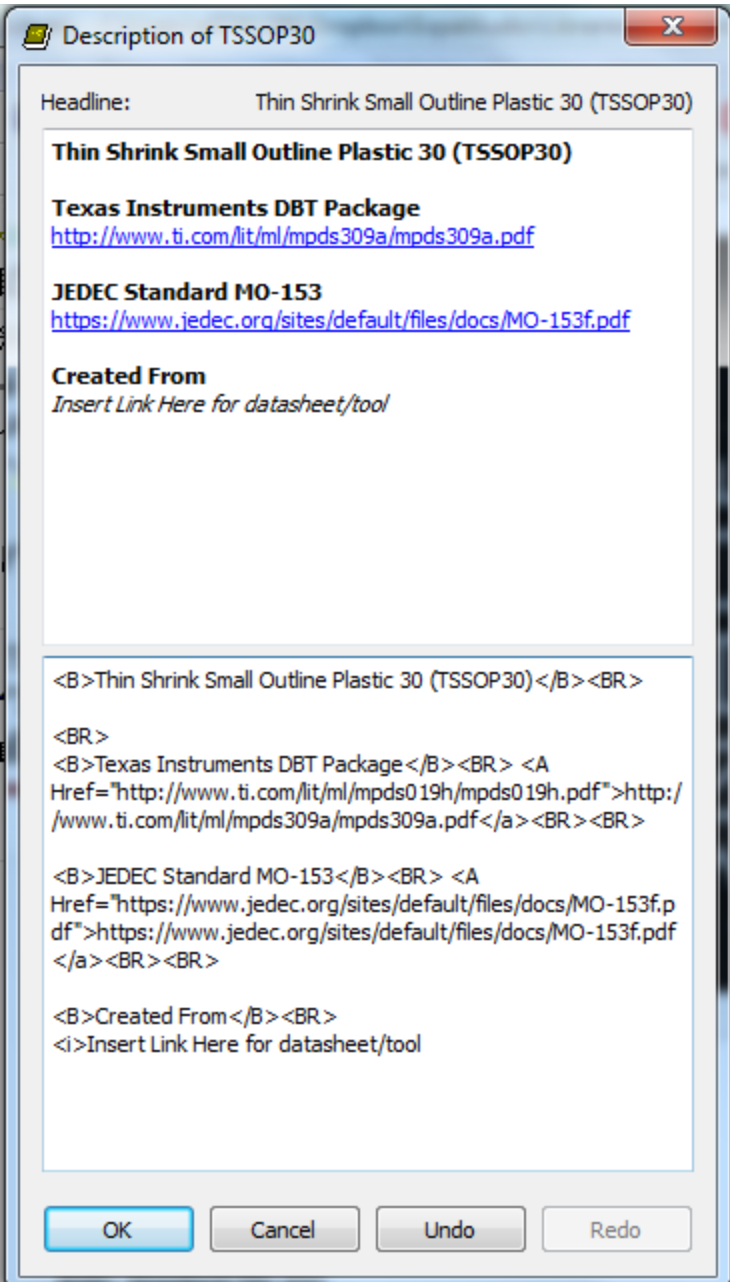
OR

Supplier name = e.g. HTSSOP44

- In Examples where there is no package, use part number (e.g. PJ327F)



Footprint Description example



Package Description

Location of footprint P
manufacturer

Give Link to
datasheet for
footprint source

Location of Jedec Standard

Created From/Using

– Datasheet, or software tool

Device Description

1 Library - C:\Users\va0741286\Dropbox\ExpatAudio\Libraries\EA-pcm186x-v1p1.lbr (PCM1862-12C.dev) - EAGLE 5.11.0 Professional

File Edit Draw View Library Options Window Help

Add Change Copy Delete Display Grid Group Move Name Quit Rect Route Script Show Signal Split Text Value Via Window Wire Write Edit

0.1 inch (-2.5 0.9)

```
add Next
stop 0
P$1 VINL2/MIN1M VINR3/MIN3P P$30
P$2 VINR2/MIN2M VINL3/MIN4P P$29
P$3 VINL1/MIN1P VINR4/MIN3M P$28
P$4 VINR1/MIN2P VINL4/MIN4M P$27
P$5 MIC_BIAS MD0 P$26
P$6 VREF AD P$25
P$7 AGND SCL P$24
P$8 AVDD SDA P$23
P$9 XO GPIO0 P$22
P$10 XI GPIO1/INTA/DMIN P$21
P$11 LDO GPIO2/INTB/DMCLK P$20
P$12 DGND GPIO3/INTC P$19
P$13 DVDD DOUT P$18
P$14 IOVDD BCK P$17
P$15 SCKI(3.3V) LRCK P$16
>NAME
>VALUE
```

Package	Variant
TSSOP30	DBT ✓

Technologies All
PCM1862-12CDBT

Description

Texas Instruments

PCM186x 103 dB 2ch S/W Controlled Audio ADC
With Universal Front End

Source: Texas Instruments - [Data sheet](#)

Created by: [mochini77](#)

New Connect

Prefix

Value Off On

Package Variant Should be added

This is excellent. Manufacturer, Description, Datasheet Link