



Altium Designer Roadshow

Library Content Creation

Rainer Asfalg

Global Head of Channel Marketing

Aida Gharakhani

Field Application Engineer

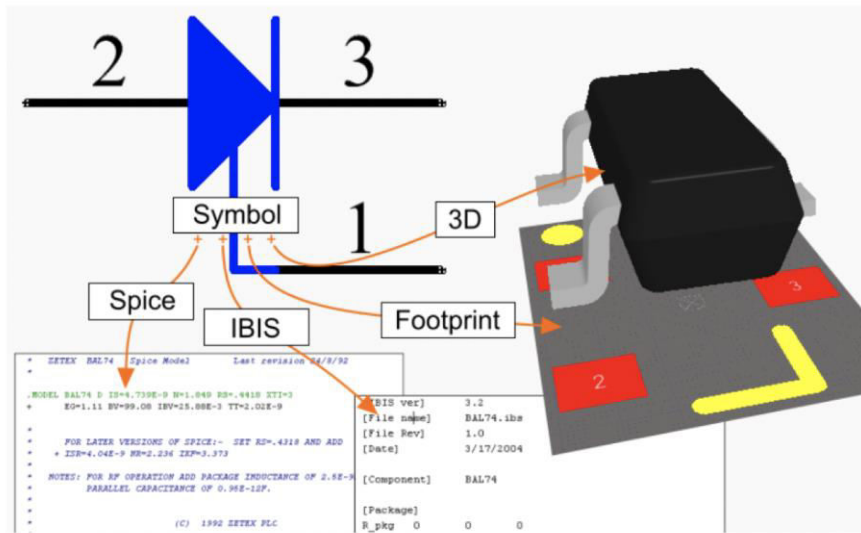
Agenda

- 1 What is a Component
- 2 How To (Basics)
 - Schematic Symbol
 - PCB Footprint
 - File Based Library
 - Databased Library
- 3 How To (State-of-the-Art)
 - Managed Library

What is a Component? - Brainstorming



What is a Component



- Schematic Symbol
- Datasheet
- Footprint
- 3D Model
- Parameters
- Simulation Models
- Vendor, Price, Availability

What you want to do with it defines what it is!

Data Sheet

Pin Diagrams - PIC16F882/883/884, 28 Pin PDIP, SOIC, SSOP

TABLE 1: PIC16F882/883/884 28-Pin Summary (PDIP, SOIC, SSOP)

Pin No.	Acronym	Component	Power	IO	TriState	Weak Pullup	Open Drain	Bus
1	AN0	ANALOG	---	IO	---	---	---	---
2	AN1	ANALOG	---	IO	---	---	---	---
3	AN2	ANALOG	---	IO	---	---	---	---
4	AN3	ANALOG	---	IO	---	---	---	---
5	AN4	ANALOG	---	IO	---	---	---	---
6	AN5	ANALOG	---	IO	---	---	---	---
7	AN6	ANALOG	---	IO	---	---	---	---
8	AN7	ANALOG	---	IO	---	---	---	---
9	AN8	ANALOG	---	IO	---	---	---	---
10	AN9	ANALOG	---	IO	---	---	---	---
11	AN10	ANALOG	---	IO	---	---	---	---
12	AN11	ANALOG	---	IO	---	---	---	---
13	AN12	ANALOG	---	IO	---	---	---	---
14	AN13	ANALOG	---	IO	---	---	---	---
15	AN14	ANALOG	---	IO	---	---	---	---
16	AN15	ANALOG	---	IO	---	---	---	---
17	AN16	ANALOG	---	IO	---	---	---	---
18	AN17	ANALOG	---	IO	---	---	---	---
19	AN18	ANALOG	---	IO	---	---	---	---
20	AN19	ANALOG	---	IO	---	---	---	---
21	AN20	ANALOG	---	IO	---	---	---	---
22	AN21	ANALOG	---	IO	---	---	---	---
23	AN22	ANALOG	---	IO	---	---	---	---
24	AN23	ANALOG	---	IO	---	---	---	---
25	AN24	ANALOG	---	IO	---	---	---	---
26	AN25	ANALOG	---	IO	---	---	---	---
27	AN26	ANALOG	---	IO	---	---	---	---
28	AN27	ANALOG	---	IO	---	---	---	---

Meta Data

Power
Price
Tolerance
Value
Vendor
Etc.

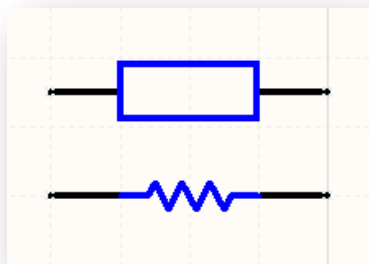
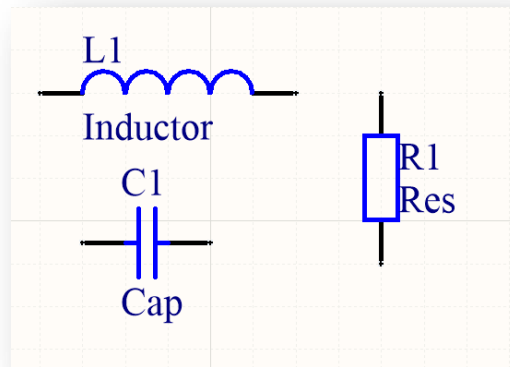
Schematic Symbol



Appearance of 2-Pin Devices

Ease Up Live

- Symbol Wizard
- SchLib List Panel

The SchLib List Panel is shown with a table of components. 'Res Pack1' is selected. Below the table, the 'Models' section shows a preview of the selected component and a list of parts from Part A to Part H.

Design Item ID	Description
Relay-Pack1	Single-Pole Single-Throw
Res Adj1	Variable Resistor
Res Adj2	Variable Resistor
Res Bridge	Resistor Bridge
Res Pack1	Isolated Resistor
Res Pack2	Isolated Resistor

Results: 195

Res Pack1

Show More

Models

1/8 .Res.Pack1

- Part A
- Part B
- Part C
- Part D
- Part E
- Part F
- Part G
- Part H

< Modes & Parts >



Footprint



Correct Grid?

- ✓ imperial -> THT
- ✓ metric -> SMD
- ✓ general -> as needed (1/10000 mil base unit)

Ease Up Live

- IPC Compliant Footprint Wizard
- Footprint Wizard
- PCBLIB List Panel (excel calculation, copy&paste)



Components



Tie Together all Needed Ingredients

- Schematic- / Integrated Library
- (SVN Controlled) Database Library
- Concord Pro / Managed Components

Key Objective

- Smart Parameter Acquisition
- Smart Component Composition



What else does a Component need ?



- Efficient Creation
- Easy Creation
- Control
- Revisions
- History
- Quality
- Audit Trail

Management !



Managed Components – Concord Pro



As we know the tools,
now we will see how to use them in an environment

- ✓ most up-to-date
- ✓ state-of-the-art
- ✓ easy

- Creation
- Acquisition
- Modification
- Classification
- Controlling



Questions?