

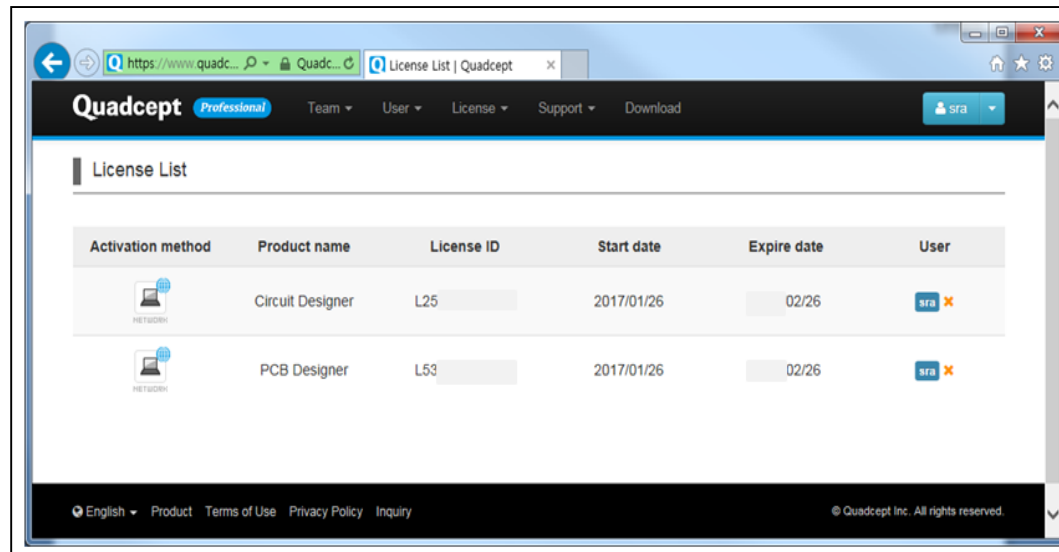
Quadcept(쿼드셉트)와 PolliEx(폴렉스)를 활용한 PCB 설계와 디자인 리뷰

차례



1. CONCEPT
2. 화면구성
3. LIBRARY
4. SCHEMATIC
5. PCB
6. VERIFICATION
with PolliEx

CONCEPT

Cloud!



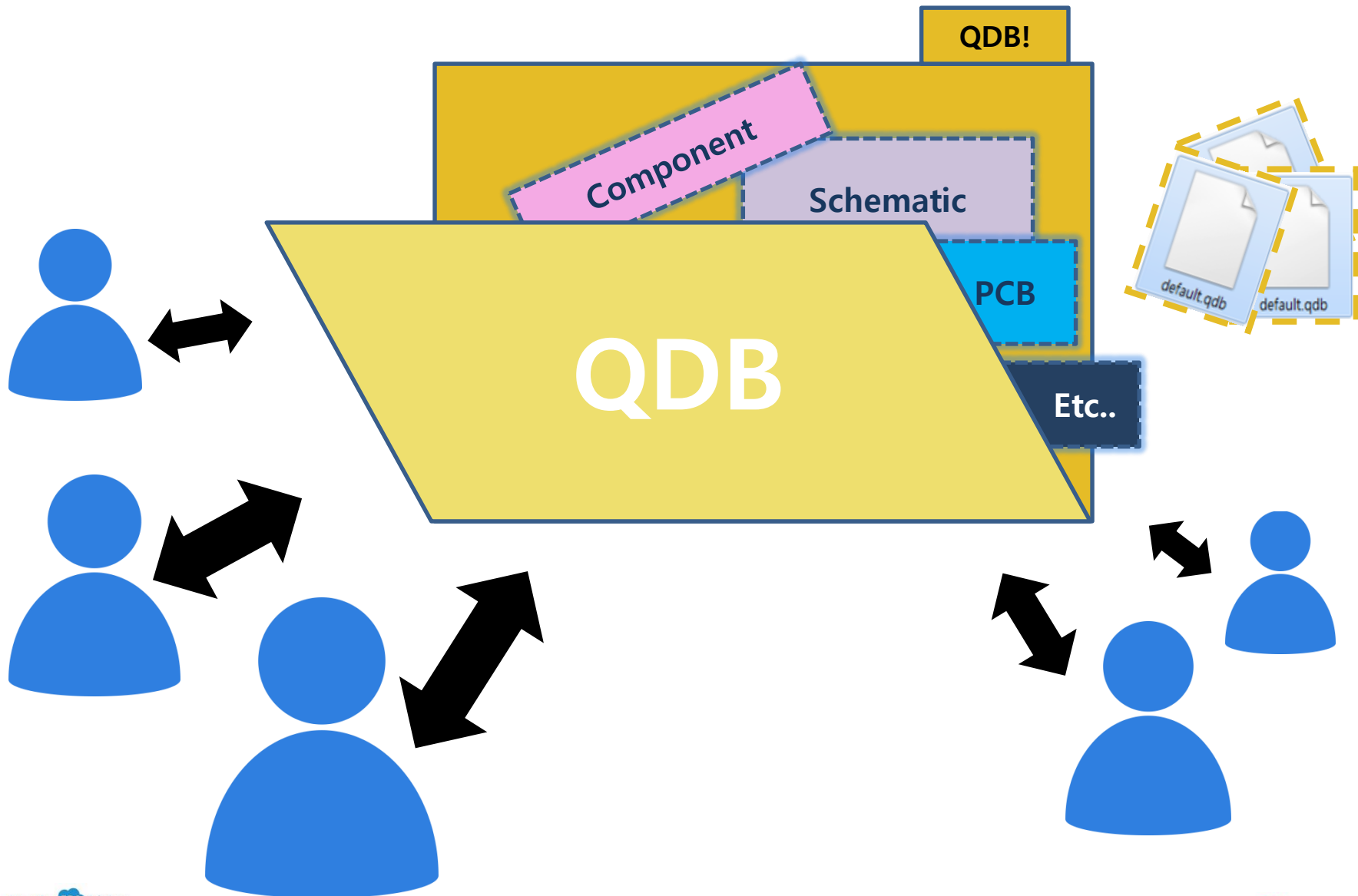
License List

Activation method	Product name	License ID	Start date	Expire date	User
	Circuit Designer	L25	2017/01/26	02/26	sra
	PCB Designer	L53	2017/01/26	02/26	sra

Great Cost Performance!



1. Concept - QDB



화 면 구 성

2. 화면구성 - Window



Quadcept File Edit Display Draw Create PCB Project Window Settings 77e0f554e1ac084c226/512d6d388bed7a09489d84f9)*

Select Move Line Component Pad Add Net Route Parallel Routing Keep Out Area
Footprint Via Delete Net Route Move Differential Pair Routes Design Rule Area
IPC Footprint

File Draw Completion

Property

Aggregate Information

Components	9
Pads	95
Cost	0

Objects

Drag Move	Invalid
Cross Probe	Invalid

Details

Coordinates

Project

Create New Open Remove

File	State
4LayerSample	
4LayerSampleSCH*	
4LayerSamplePCB*	
Panel1	
SingleSideSample	
Arduino Uno (300 pins limits)	
ROHM_BD9E300EFJ_Referenc	
Arduino	
Temporary Project1	

Start Page x 4LayerSample...* x

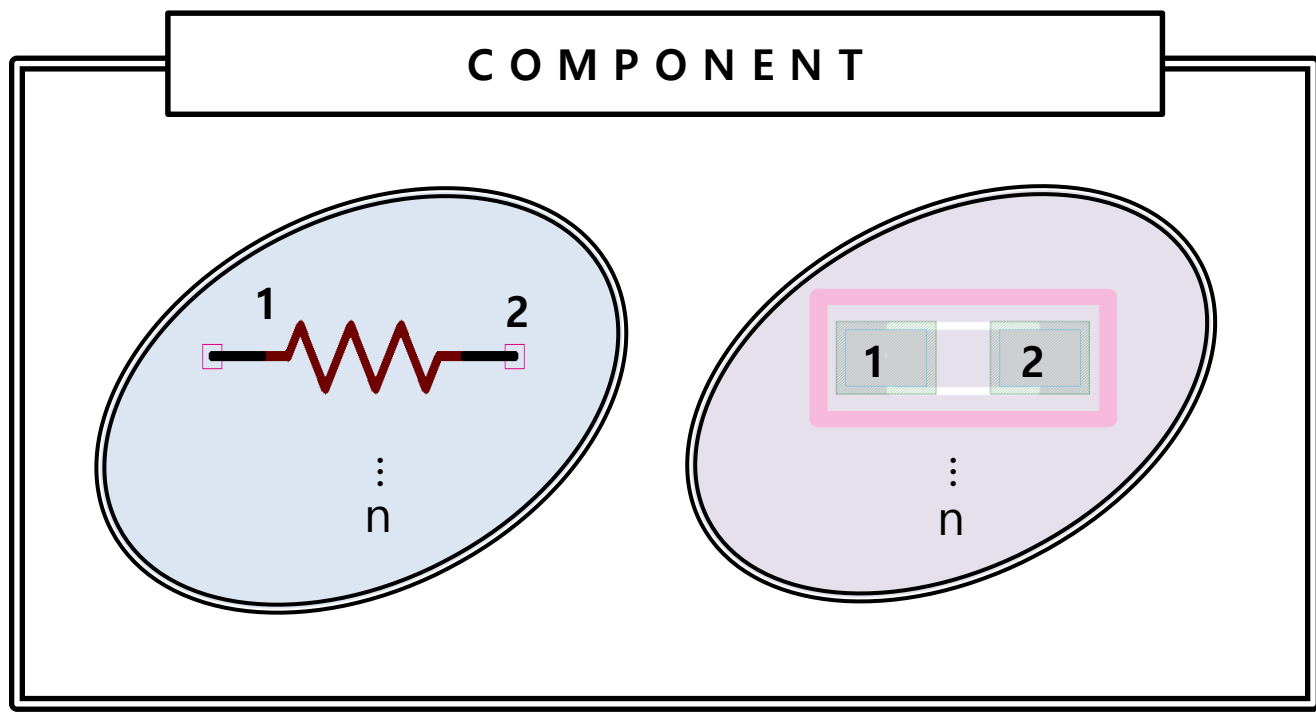
Command ERC Results DRC Results MRC Results Search Results Design Instructions

Current Layer Other Layer Type Board Previous Layer : Bottom mm GRID 1 GUIDE 0.025

X:29.625 Y:50.625 Select User ID : sra@cadnix.com

LIBRARY

3. Library - Concept



3. Library - Attribute

Attribute Pin Swap Assignment

Reference: R

Exclude from Being Updated
 Hide Reference
 Set as Mechanical Components (excluded from netlist)
 Set as Unmounted Component

Attribute	Value	Show
Category		<input type="checkbox"/>
Manufacturer		<input type="checkbox"/>
Manufacturer Part Nbr		<input type="checkbox"/>
Description		<input type="checkbox"/>
Value		<input type="checkbox"/>
Chip1Stop Part Nbr		<input type="checkbox"/>
Digi-Key Part Number		<input type="checkbox"/>
RS Components Part N		<input type="checkbox"/>
ElectricalPartType		<input type="checkbox"/>
MountType		<input type="checkbox"/>
Datasheet		<input type="checkbox"/>
PCBFootprint		<input type="checkbox"/>




Digi-Key Search

Part Number/Keyword: [Search] Country: United States (USD)

Product Index
Results matching criteria: 6,091,139

Digi-Key Part Number	Manufacturer	Manufacturer Part Nbr	Description	RoHS	Lead free

Digi-Key Parts Detail


Digi-Key Part Number YAG1457CT-ND
Manufacturer Yageo
Manufacturer Part Number RT0402BRD075K1L
Description RES SMD 5.1K OHM 0.1% 1/16W 0402
Lead free Lead Free
RoHS RoHS Compliant
Quantity Available 6,689
Unit Price(MOQ) \$0.4 (1)

Attribute	Value	Import to
Digi-Key Part Number	YAG1457CT-ND	Digi-Key Part Number
Manufacturer	Yageo	<input checked="" type="radio"/> Manufacturer
Manufacturer Part Number	RT0402BRD075K1L	Category
Description	RES SMD 5.1K OHM 0.1% 1/16W 0402	Manufacturer Part Number
Lead free	Lead Free	Description
RoHS	RoHS Compliant	Value
Quantity Available	6,689	Datasheet
Packaging	Cut Tape (CT)	PCBFootprint
Resistance (Ohms)	5.1k	
Tolerance	±0.1%	
Power (Watts)	0.063W, 1/16W	
Composition	Thin Film	
Features	Moisture Resistant	
Temperature Coefficient	±25ppm/°C	
Operating Temperature	-55°C ~ 155°C	
Package / Case	0402 (1005-Metric)	
Supplier Device Package	0402	
Size / Dimension	0.039" L x 0.020" W (1.00mm x 0.50mm)	
Height - Seated (Max)	0.014" (0.35mm)	
Failure Rate	-	
Datasheets	RT Series Datasheet	
Product Photos	0402-(1005-Metric)	
Product Training Modules	Chip Resistor	
Catalog Drawings	Thin Film Resistor Side	



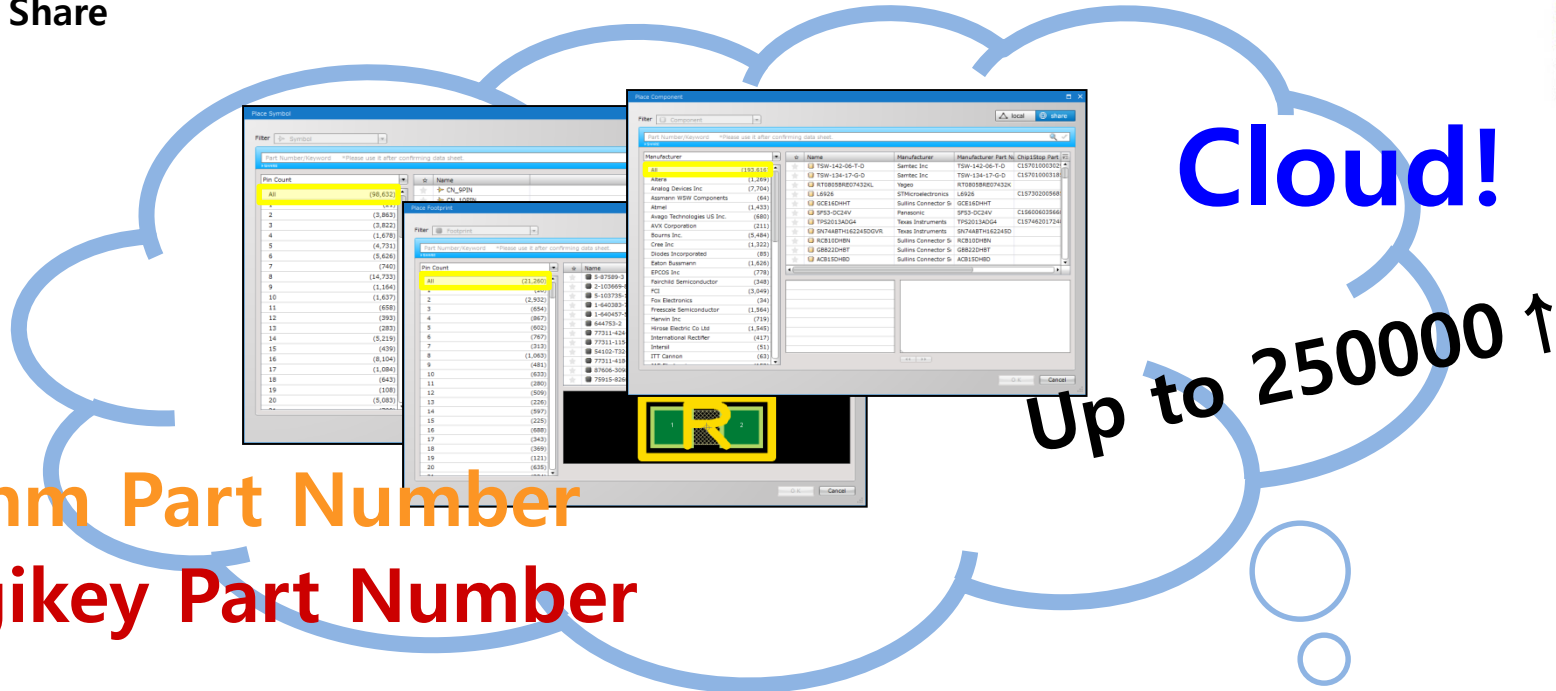
Attribute Pin Swap Assignment

Reference: R

Exclude from Being Updated
 Hide Reference
 Set as Mechanical Components (excluded from netlist)
 Set as Unmounted Component

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Category	Resistor	<input type="checkbox"/>
Manufacturer	Yageo	<input type="checkbox"/>
Manufacturer Part Nbr	RT0402BRD075K1L	<input type="checkbox"/>
Description	RES SMD 5.1K OHM 0.1% 1/16W 0402	<input type="checkbox"/>
Value	5.1k	<input type="checkbox"/>
Chip1Stop Part Nbr		<input type="checkbox"/>
Digi-Key Part Number	YAG1457CT-ND	<input checked="" type="checkbox"/>
RS Components Part N		<input type="checkbox"/>
ElectricalPartType	Resistor	<input type="checkbox"/>
MountType	SMD	<input type="checkbox"/>
Datasheet	http://www.yageo.com/documents/recent/PYu-RT_1-to-0.01_RoHS_L_7.pdf	<input checked="" type="checkbox"/>
PCBFootprint		<input type="checkbox"/>

3. Library - Share

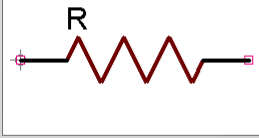


+Rohm Part Number
+Digikey Part Number

Component

Symbols

- RT0402BRD075K1L
- RES
- RC0402N



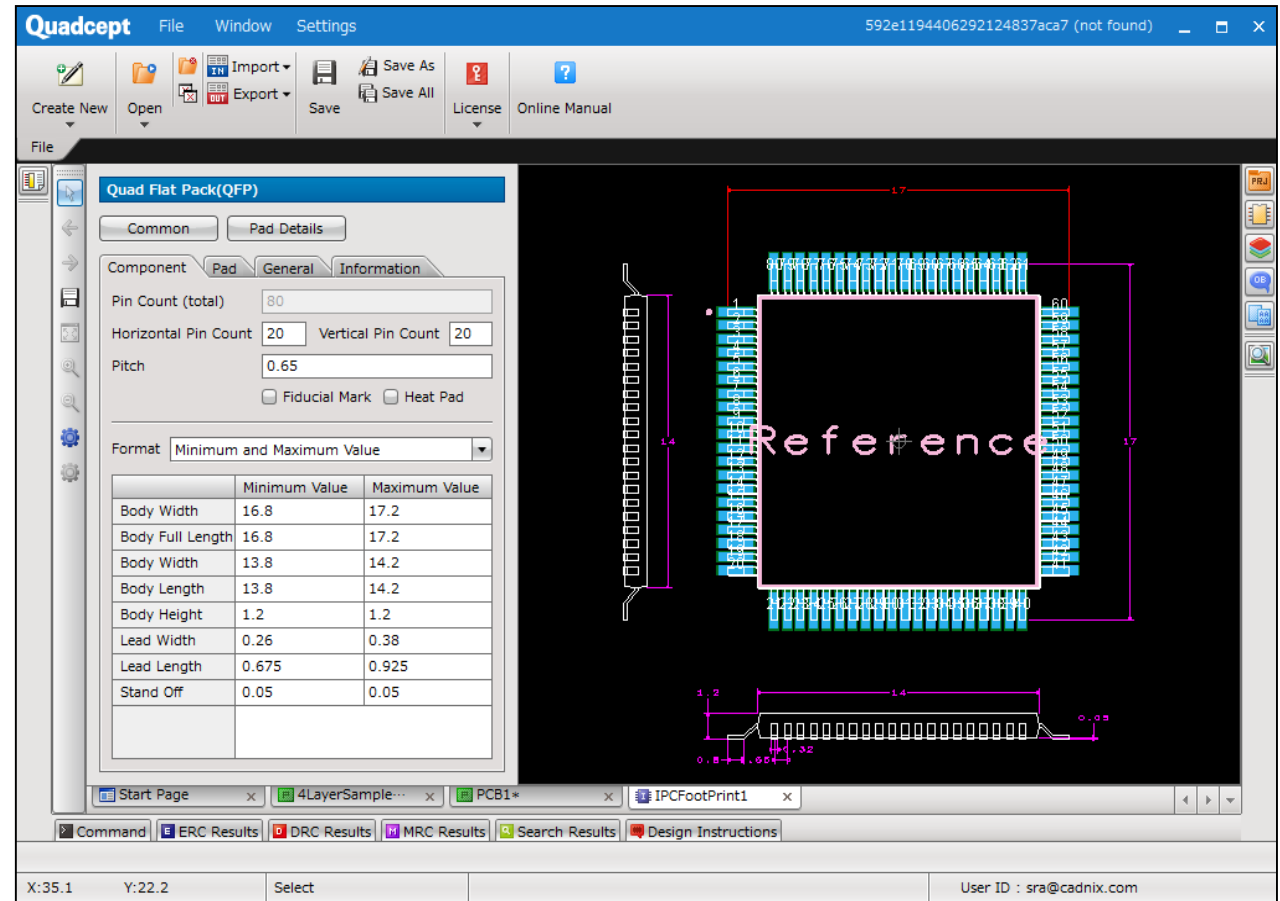
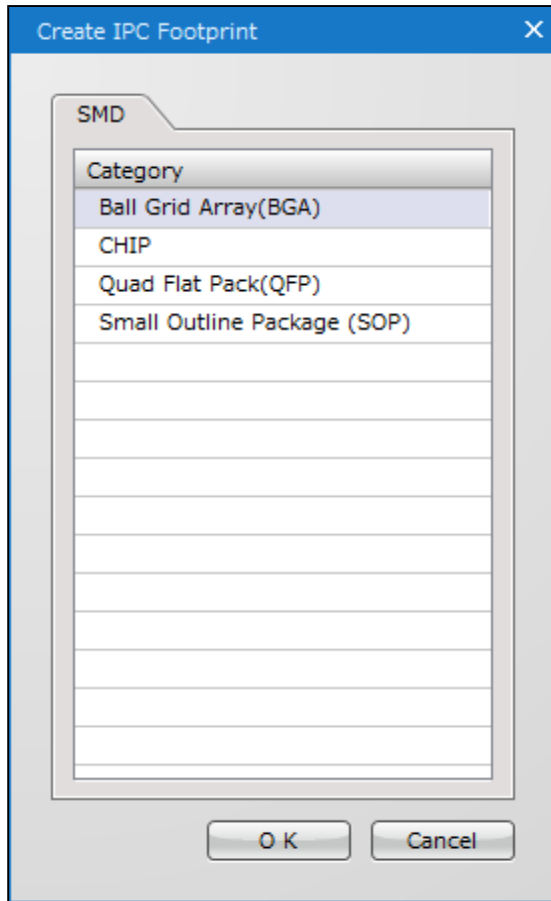
Attribute Pin Swap Assignment

Reference: R

Exclude from Being Updated
 Hide Reference
 Set as Mechanical Components (excluded from netlist)
 Set as Unmounted Component

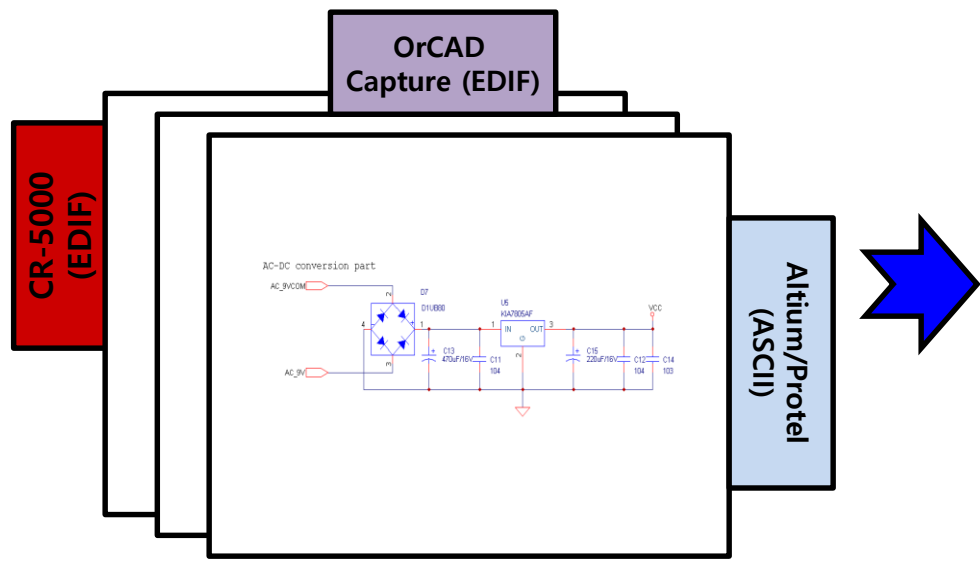
Attribute	Value	Show
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Manufacturer	Yageo	<input type="checkbox"/>
Manufacturer Part Num	RT0402BRD075K1L	<input type="checkbox"/>
Description	RES SMD 5.1K OHM 0.1% 1/16W 0402	<input type="checkbox"/>
Value	5.1k	<input type="checkbox"/>
Chip1Stop Part Numbe		<input type="checkbox"/>
Digi-Key Part Number	YAG1457CT-ND	<input type="checkbox"/>
RS Components Part N		<input type="checkbox"/>
ElectricalPartType	Resistor	<input type="checkbox"/>
MountType	SMD	<input type="checkbox"/>
Datasheet	http://www.yageo.com/documents/recent/PYu-RT_1-to-0.01_RoHS_L_7.pdf	<input type="checkbox"/>
PCBFootprint		<input type="checkbox"/>

3. Library – Wizard(IPC)



S C H E M A T I C

4. Schematic – Interface



4. Schematic – Stroke (1/2)

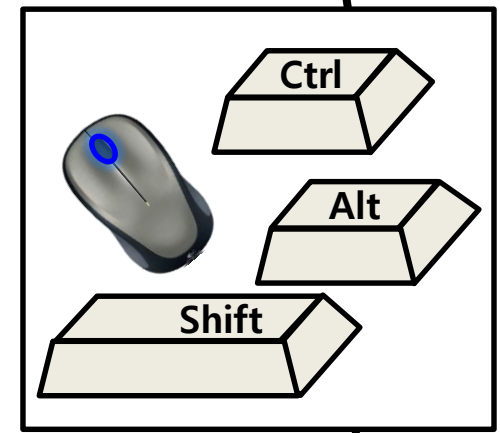
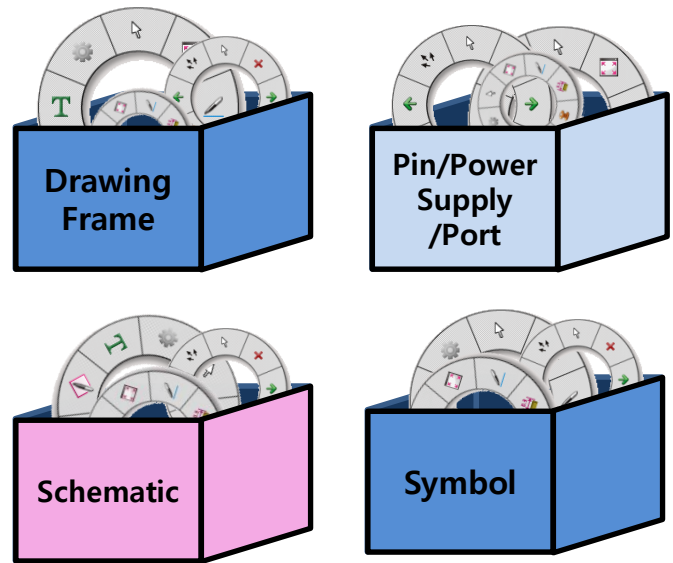


The screenshot shows the Quadcept software interface. The top menu bar includes File, Edit, Display, Draw, Create Schematic, Project, Window, Settings, and a3). The toolbar contains various icons for selection, drawing, and wiring. A circular menu is overlaid on the schematic, with a red arrow pointing to the 'WIRE' option. The schematic itself shows a central component with multiple pins connected to various circuit elements. A status bar at the bottom indicates 'Create Wire' and 'Please click the start point.' A table in the bottom right corner contains design information:

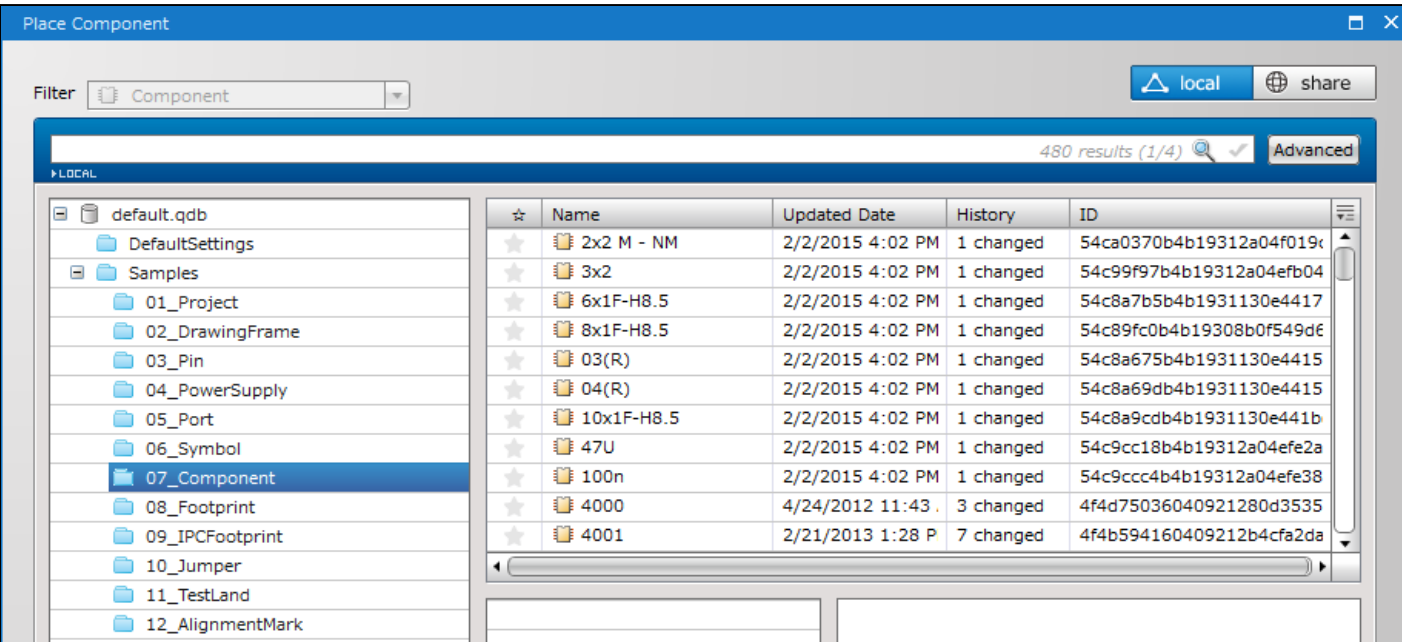
DESIGN	DWG	CHECK	APPROVAL
Title: 4LayerSample			
No. Input DRWG.No			
Quadcept			AA
			/-



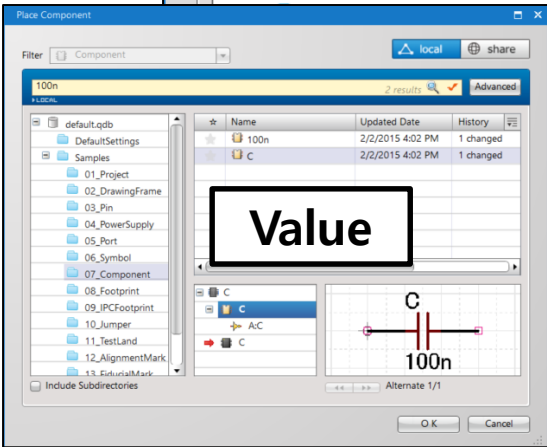
MAX 32 Functions!



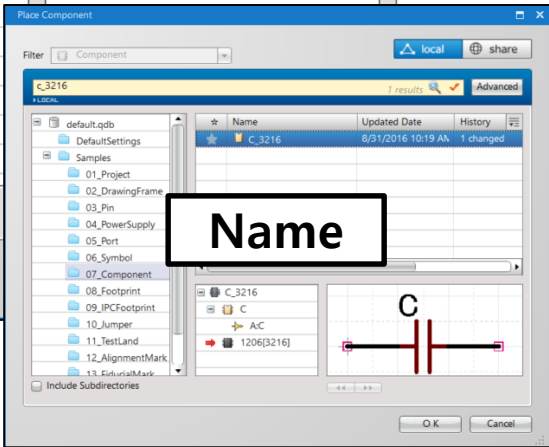
4. Schematic – Search



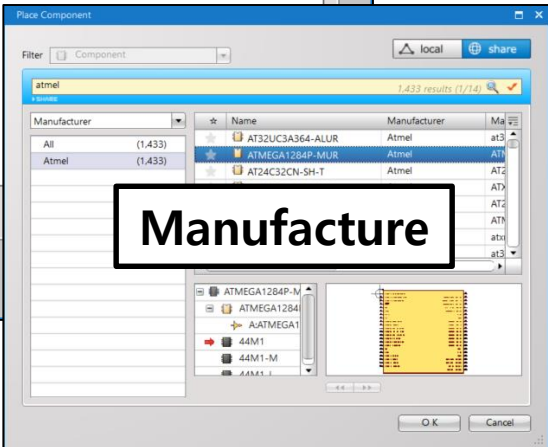
Name	Updated Date	History	ID
2x2 M - NM	2/2/2015 4:02 PM	1 changed	54ca0370b4b19312a04f019c
3x2	2/2/2015 4:02 PM	1 changed	54c99f97b4b19312a04efb04
6x1F-H8.5	2/2/2015 4:02 PM	1 changed	54c8a7b5b4b1931130e4417
8x1F-H8.5	2/2/2015 4:02 PM	1 changed	54c89fc0b4b19308b0f549d6
03(R)	2/2/2015 4:02 PM	1 changed	54c8a675b4b1931130e4415
04(R)	2/2/2015 4:02 PM	1 changed	54c8a69db4b1931130e4415
10x1F-H8.5	2/2/2015 4:02 PM	1 changed	54c8a9cdb4b1931130e441b
47U	2/2/2015 4:02 PM	1 changed	54c9cc18b4b19312a04efe2a
100n	2/2/2015 4:02 PM	1 changed	54c9ccc4b4b19312a04efe38
4000	4/24/2012 11:43	3 changed	4f4d75036040921280d3535
4001	2/21/2013 1:28 P	7 changed	4f4b594160409212b4cfa2da



Value

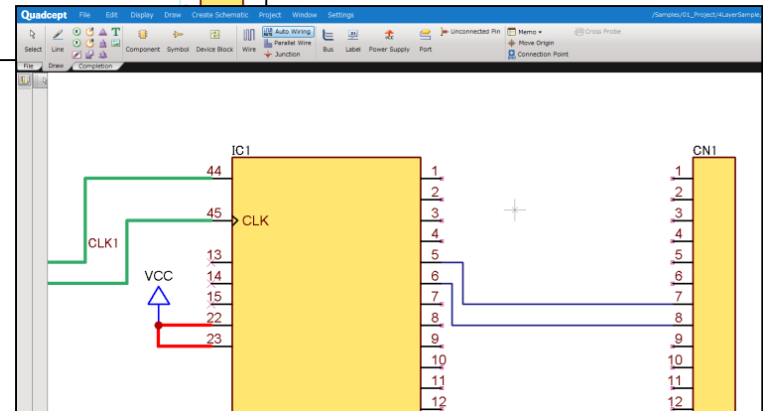
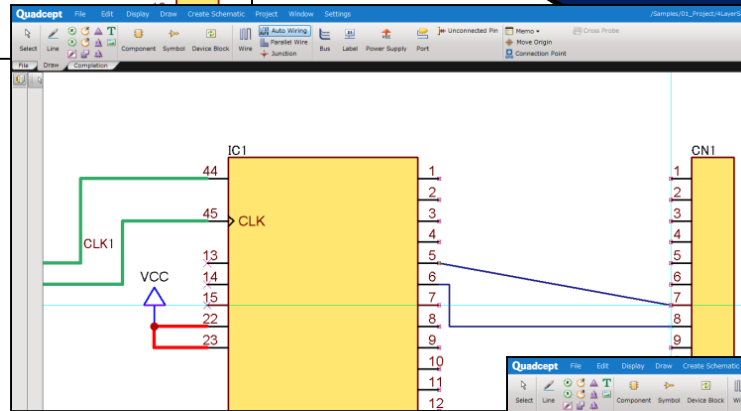
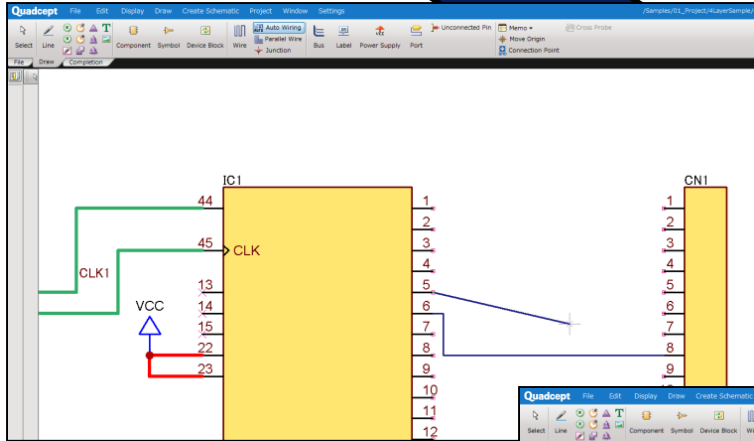
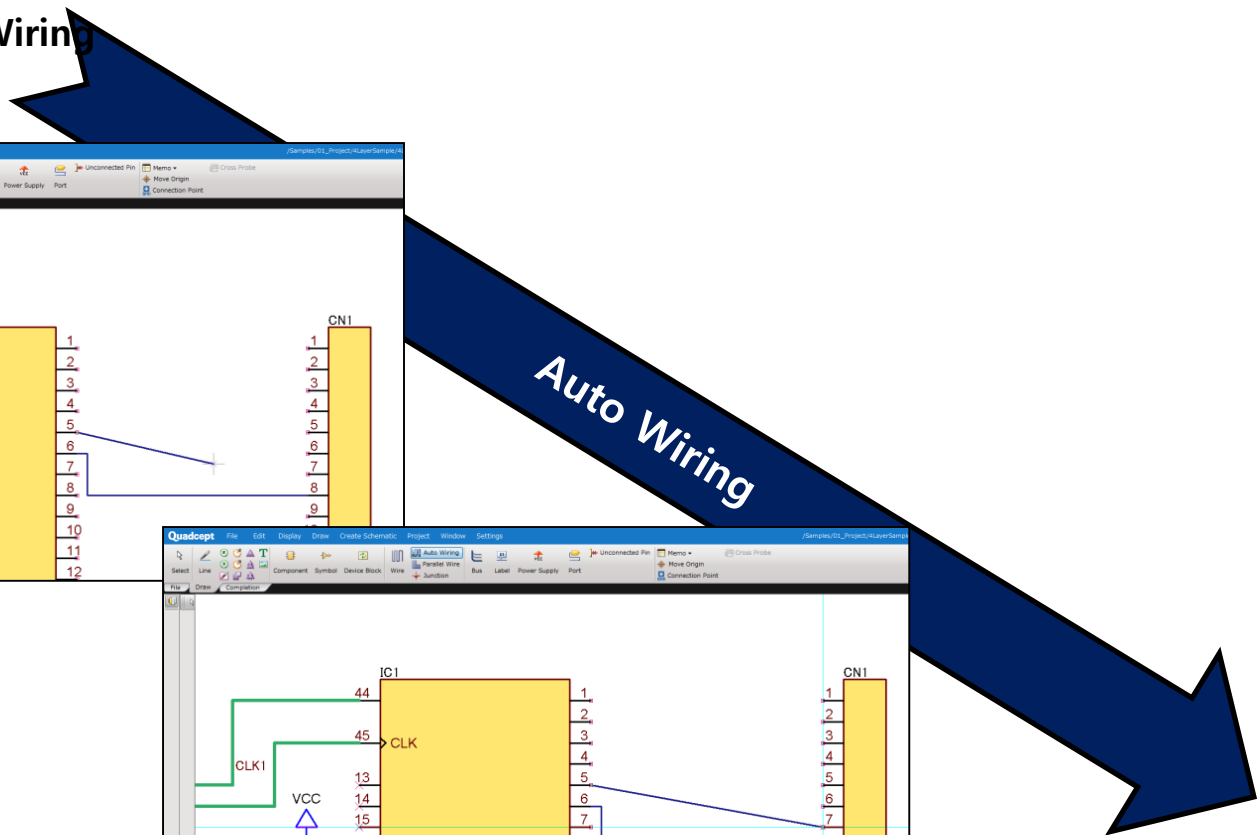


Name

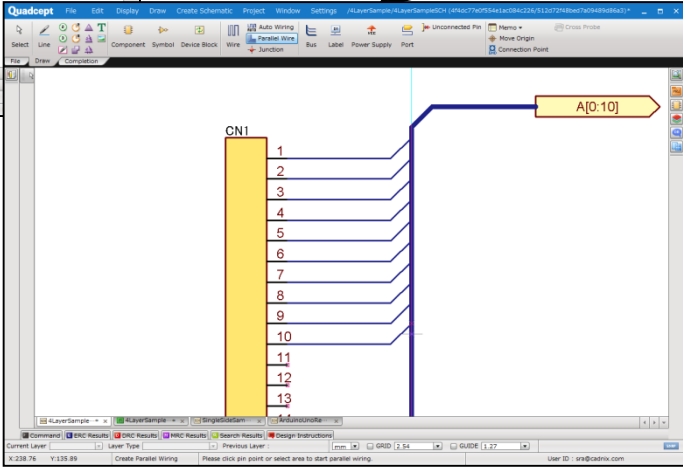
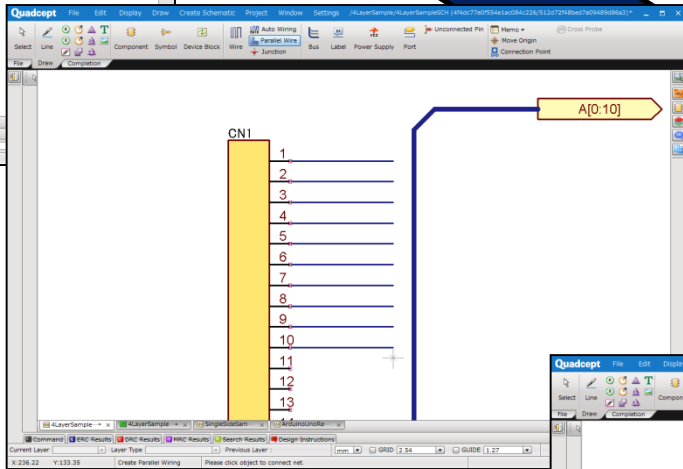
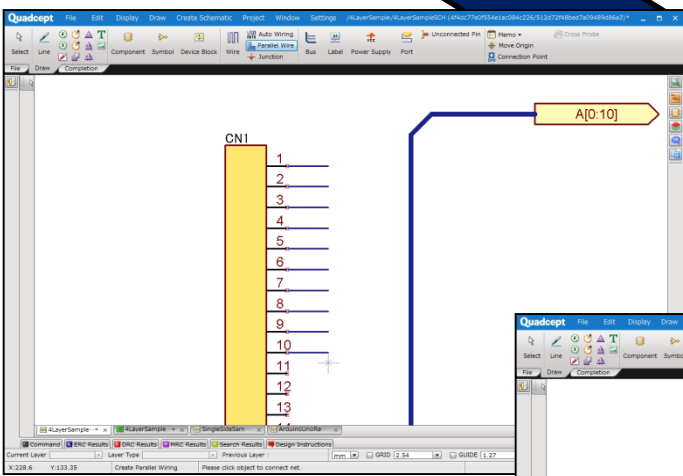
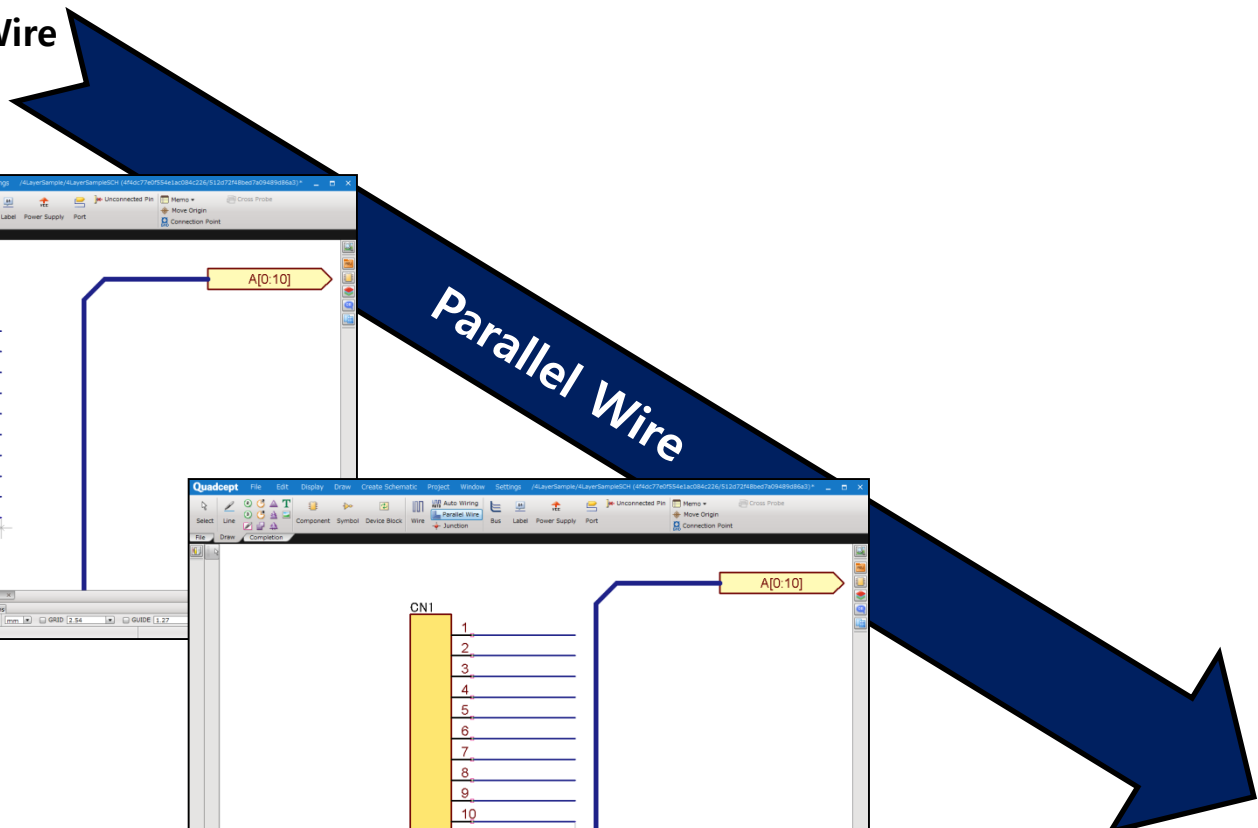


Manufacturer

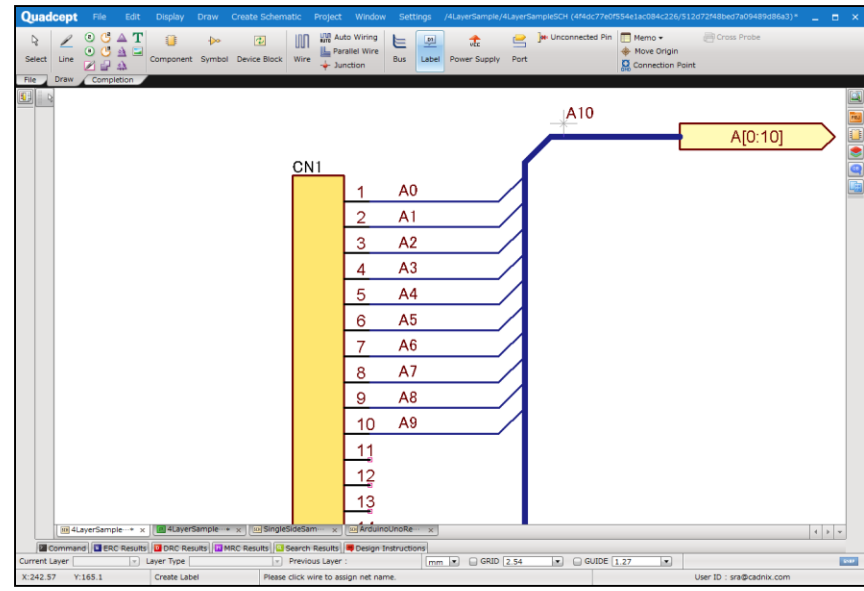
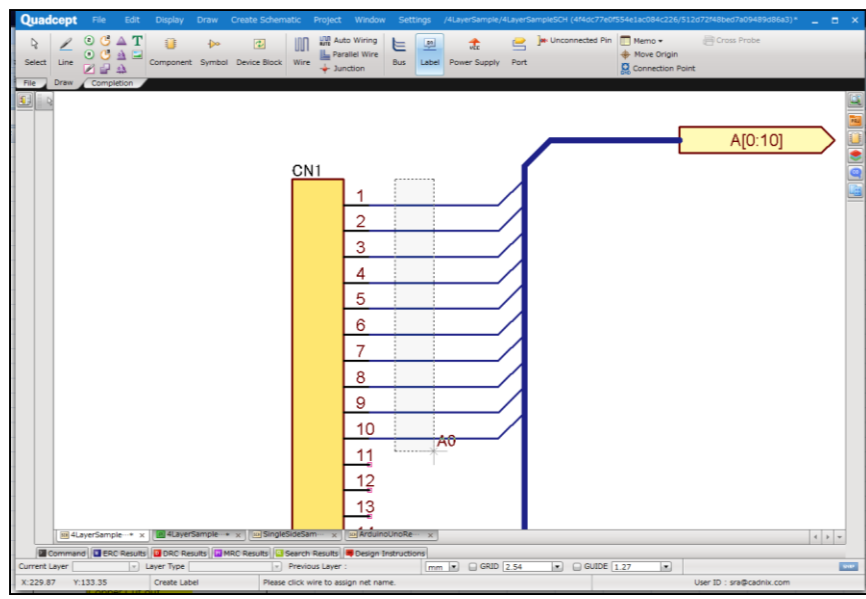
4. Schematic – Auto Wiring



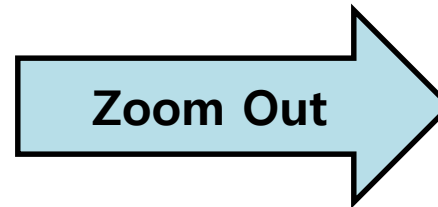
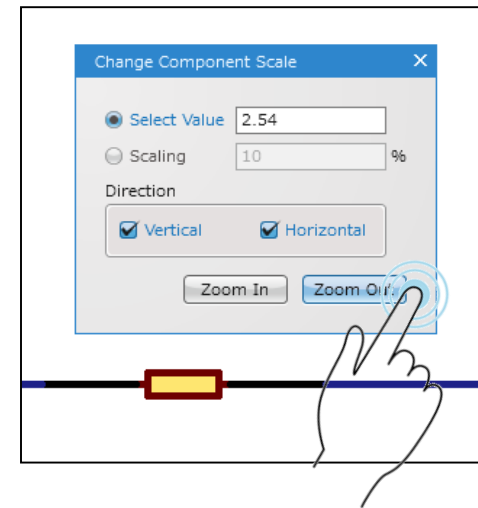
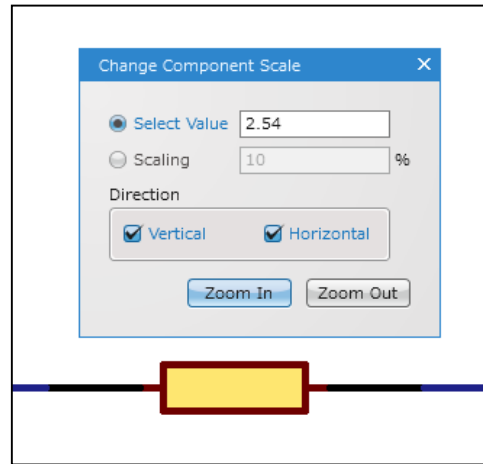
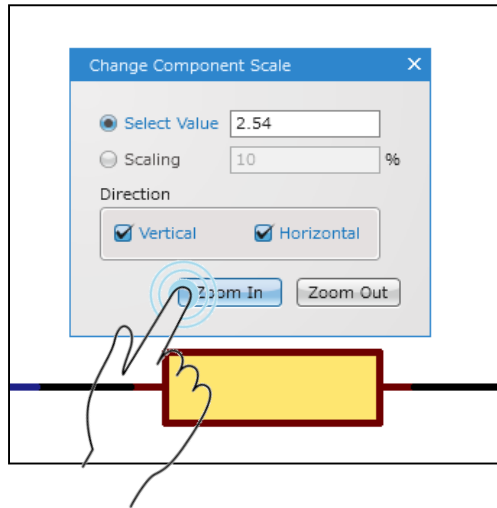
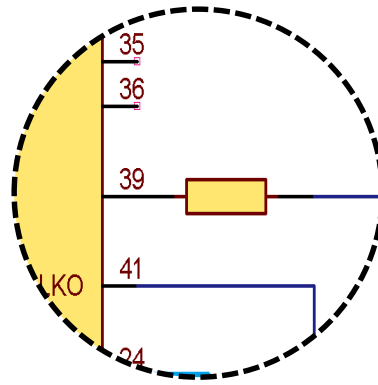
Schematic – Parallel Wire



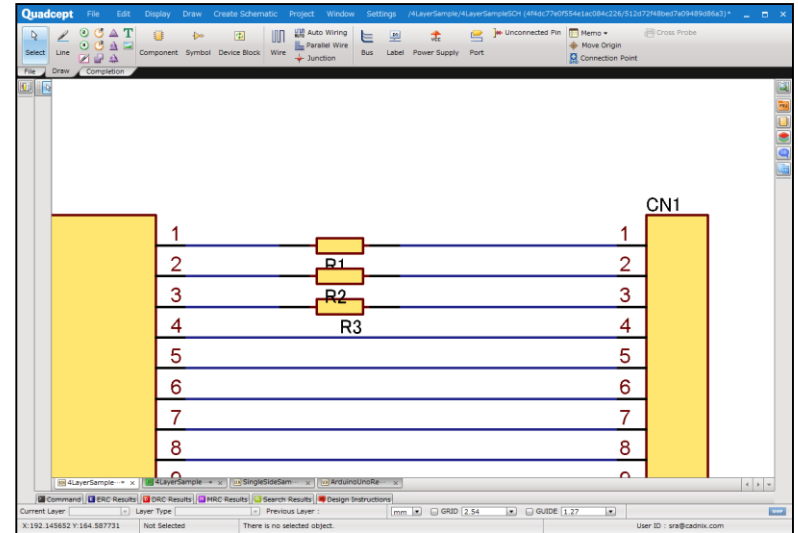
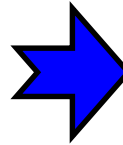
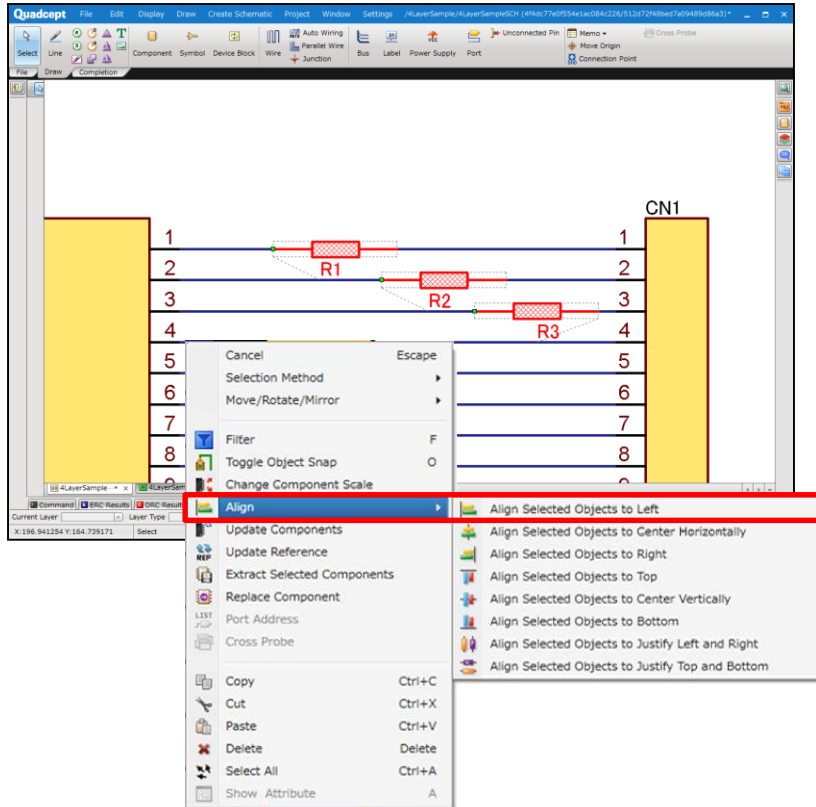
4. Schematic – Auto Label



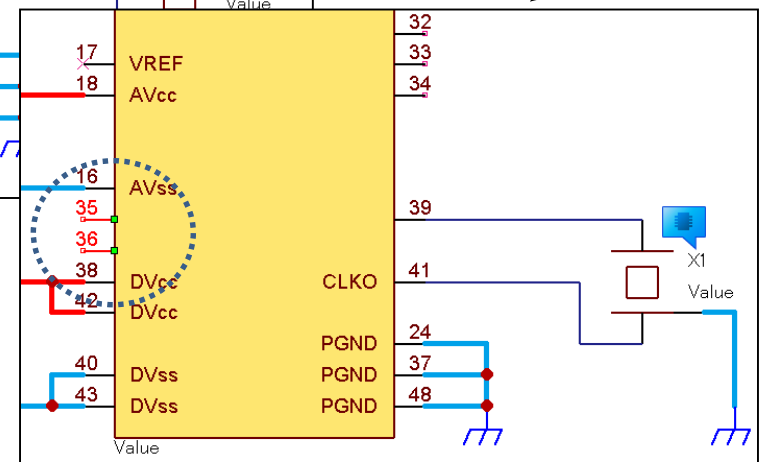
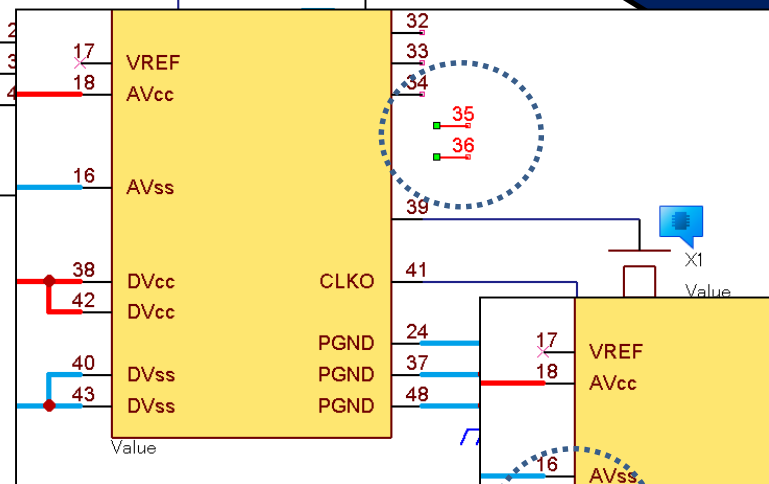
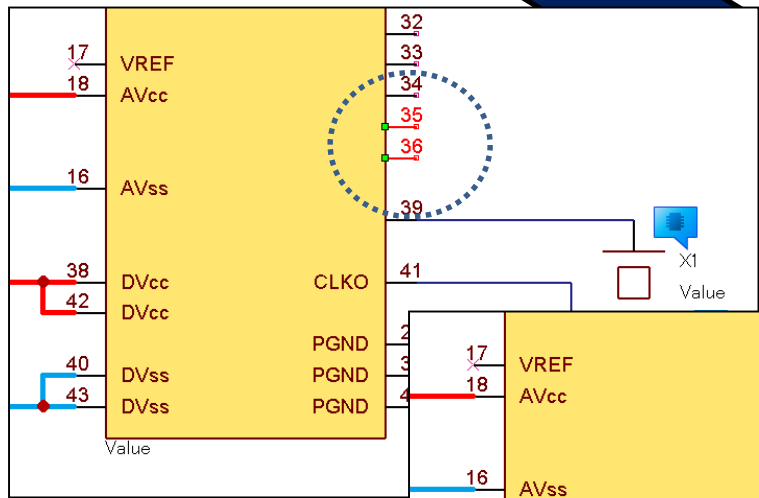
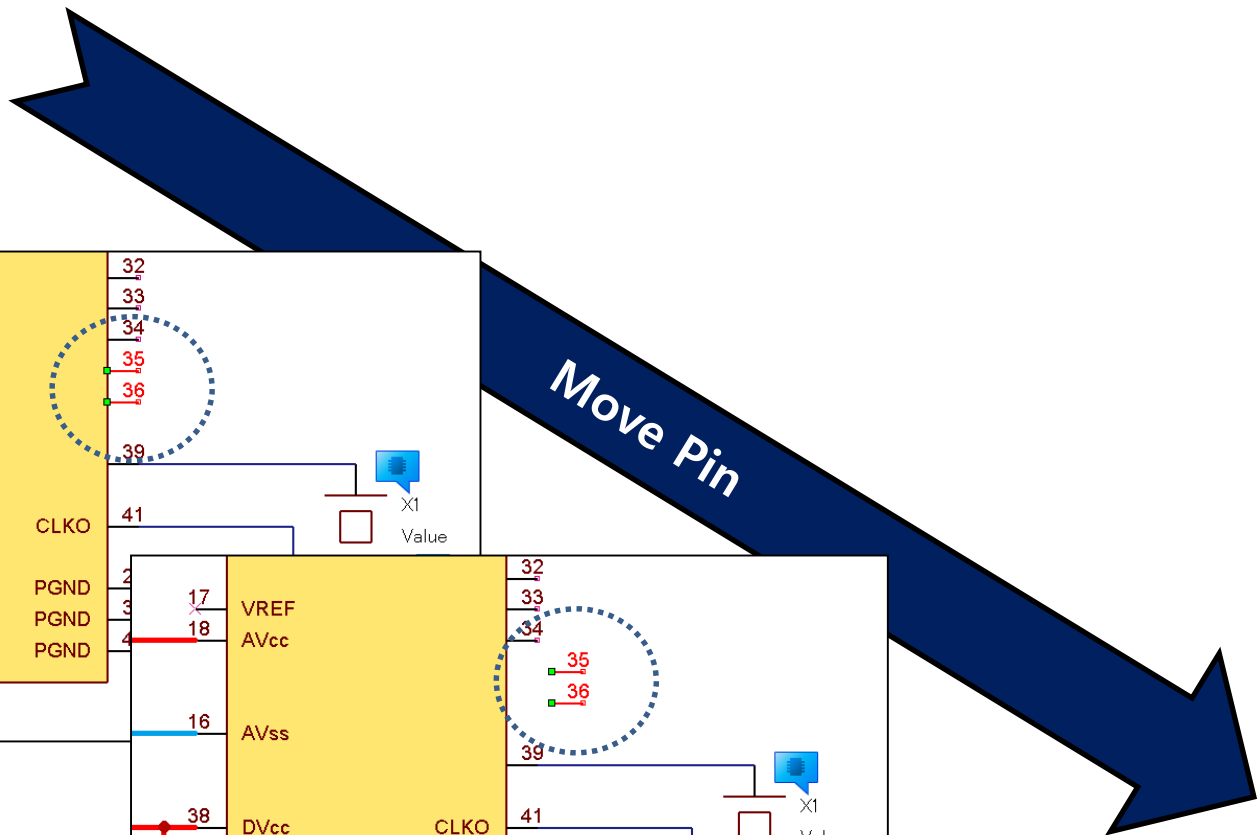
4. Schematic – Symbol Scale



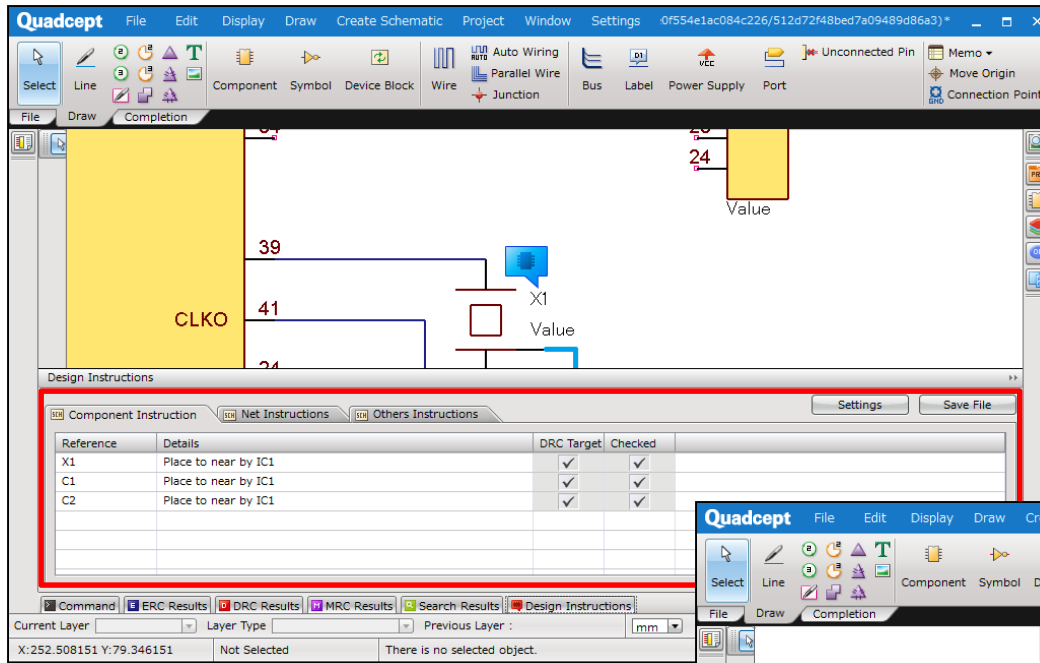
4. Schematic – Alignment



Schematic – Move Pin

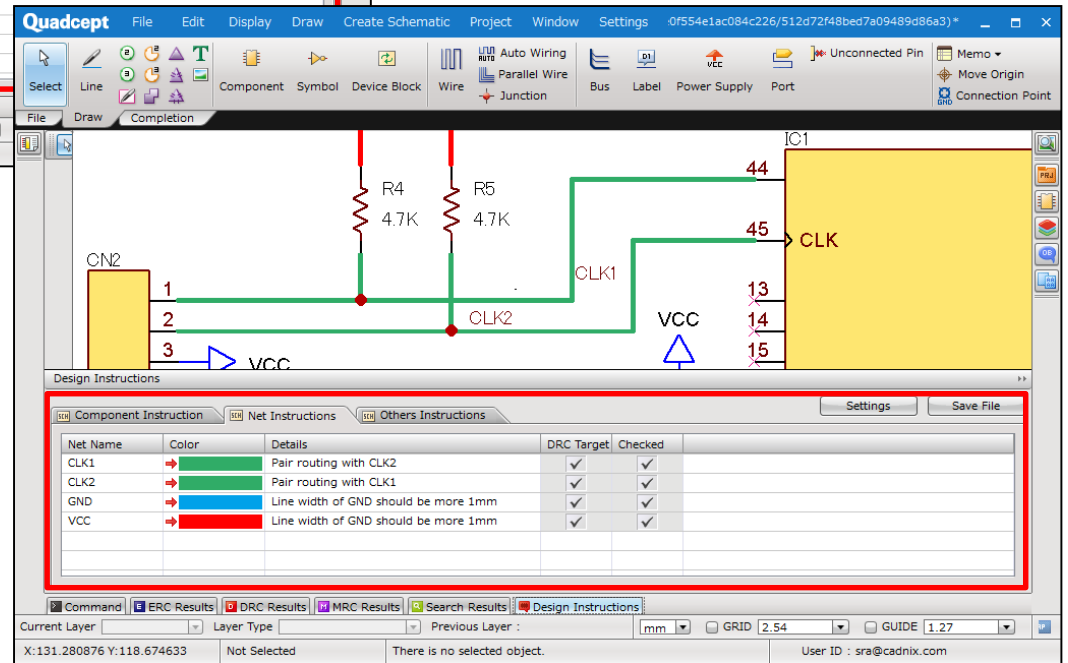


4. Schematic – Design Instruction



The screenshot shows the Quadcept software interface. The main workspace displays a schematic with a component labeled 'X1' and a net labeled 'Value'. The Design Instructions table is highlighted with a red border and contains the following data:

Reference	Details	DRC Target	Checked
X1	Place to near by IC1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
C1	Place to near by IC1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
C2	Place to near by IC1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



The screenshot shows a more detailed schematic in Quadcept. It includes components R4 (4.7K), R5 (4.7K), and IC1. The Design Instructions table is highlighted with a red border and contains the following data:

Net Name	Color	Details	DRC Target	Checked
CLK1	→	Pair routing with CLK2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CLK2	→	Pair routing with CLK1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GND	→	Line width of GND should be more 1mm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
VCC	→	Line width of GND should be more 1mm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

4. Schematic – BOM

Component Attributes List : Arduino Uno (300 pins limits)[Schematic]

Reference	Quantity	Value	NoMount	Part Number	Chip1Stop Part Number	Digi-Key Part Number	RS Components Part Number	ComponentFileName	SymbolFileName	FootPrintFileName
1	AD	1	6x1F-H8.5	<input type="checkbox"/>	PPTC061LFBN-R	C1S732300101311	S7004-ND	6x1F-H8.5	07(6)	6x1F-H8.5
2	C1-2,C5-7	5	100n	<input type="checkbox"/>	CC0603KRX7R9J	C1S900100993319	311-1344-1-ND	100n	11	03(R)
3	C3,C8	2	1u	<input type="checkbox"/>	GRM188R60J10	C1S517900047911	490-1550-1-ND	100n	11	03(R)
4	C4	1	100n	<input type="checkbox"/>	CC0603KRX7R9J	C1S900100993319	311-1344-1-ND	C	C	03(R)
5	C9,C11	2	22p	<input type="checkbox"/>	500R14N220JV4	C1S403400030215	709-1143-1-ND	100n	11	03(R)
6	D1	1		<input type="checkbox"/>	EGF1T-E3/67A-1	C1S803601711353	EGF1T-E3/67AGICT-ND	M7	12(D1 M1)	M7
7	D2	1		<input type="checkbox"/>	CD1206-S01575E	C1S134600208354	CD1206-S01575CT-ND	M7	12(D1 M1)	M7
8	D3	1		<input type="checkbox"/>	CD1206-S01575E	C1S134600208354	CD1206-S01575CT-ND	CD1206-S01575	21	M7
9	F1	1	MF-MSMF050-2 50	<input type="checkbox"/>	MFMSMF0502	C1S134600297507	MF-MSMF050-2CT-ND	04(R)	04(R)	04(R)
10	GROUND,RESET-EN	2	0	<input type="checkbox"/>	MCR10EZPJ000-	C1S625901565935	RHMO.0ARCT-ND	RESET	16(RESET)	0805[2012]
11	ICSP,ICSP1	2	3x2 M	<input type="checkbox"/>	67996-406HLF	C1S227400058842	609-3218-ND	3x2	05	3x2
12	IOH	1	10x1F-H8.5	<input type="checkbox"/>	PPTC101LFBN-R	C1S732300084616	S7008-ND	10x1F-H8.5	06(10)	10x1F-H8.5
13	IOL_POWER	2	8x1F-H8.5	<input type="checkbox"/>	PPTC081LFBN-R	C1S732300101348	S7006-ND	8x1F-H8.5	02	8x1F-H8.5
14	JP2	1	2x2 M	<input type="checkbox"/>	PPTC022LFBN-R	C1S732300084315	S7070-ND	2x2 M - NM	20(4pin)	2x2 M - NM
15	L,RX,TX	3	YELLOW	<input type="checkbox"/>	APT2012YC	C1S410301883787	754-1135-1-ND	YELLOW	14	YELLOW
16	L1	1		<input type="checkbox"/>	BLM21PG221SN	C1S521301034173	490-1054-1-ND	04(R)	04(R)	0805[2012]
17	ON	1	GREEN	<input type="checkbox"/>	LGR971-KN-1-Z	C1S543900031702	475-1410-1-ND	YELLOW	14	YELLOW
18	PC1-2	2	47u	<input type="checkbox"/>	EMVA250ADA47	C1S758600238155	565-2103-1-ND	47U	10	DC_D63
19	R1	1	1M	<input type="checkbox"/>	ERJ3GEYJ105V	C1S600603154706	P1.0MGCT-ND	03(R)	03(R)	03(R)
20	R2	1	1M	<input type="checkbox"/>	ERJ3GEYJ105V	C1S600603154706	P1.0MGCT-ND	04(R)	04(R)	03(R)
21	R3	1	10k	<input type="checkbox"/>	ERJ3GEYJ103V	C1S600600055398	P10KGCT-ND	03(R)	03(R)	03(R)
22	R4-6	3	10k	<input type="checkbox"/>	ERJ3GEYJ103V	C1S600600055398	P10KGCT-ND	03(R)	03(R)	03(R)
23	R7-8	2	1k	<input type="checkbox"/>	ERJ-3GEYJ102V	C1S600600632911	P1.0KGCT-ND	03(R)	03(R)	03(R)
24	RESET	1	TS42031-160R-TR	<input type="checkbox"/>	FSM1LPATR	C1S757106708023	450-1760-1-ND	TS42031-160R-TR-726	22	TS42031-160R-TR-726
25	RN2	1	1k	<input type="checkbox"/>	CAY16-102J4LF	C1S134600310507	CAY16-102J4LFCT-ND	RN(2)	03(R)	RN(2)
26	RN3	1	22	<input type="checkbox"/>	CAY16-220J4LF	C1S134600438982	CAY16-220J4LFCT-ND	RN(3)	03(R)	RN(2)

Display Options

Group Same Attributes

Citation [R1,R2,R3,U1,U2]

Group [R1-3,U1-2]

Update

Import/Export Close

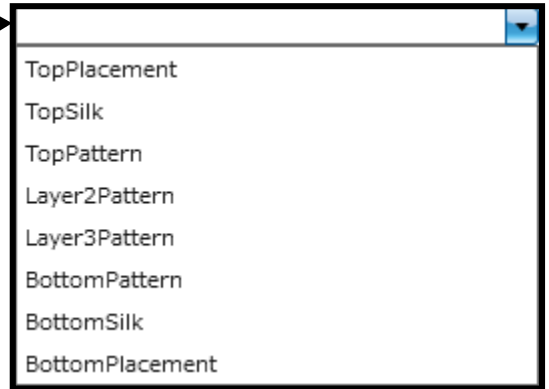
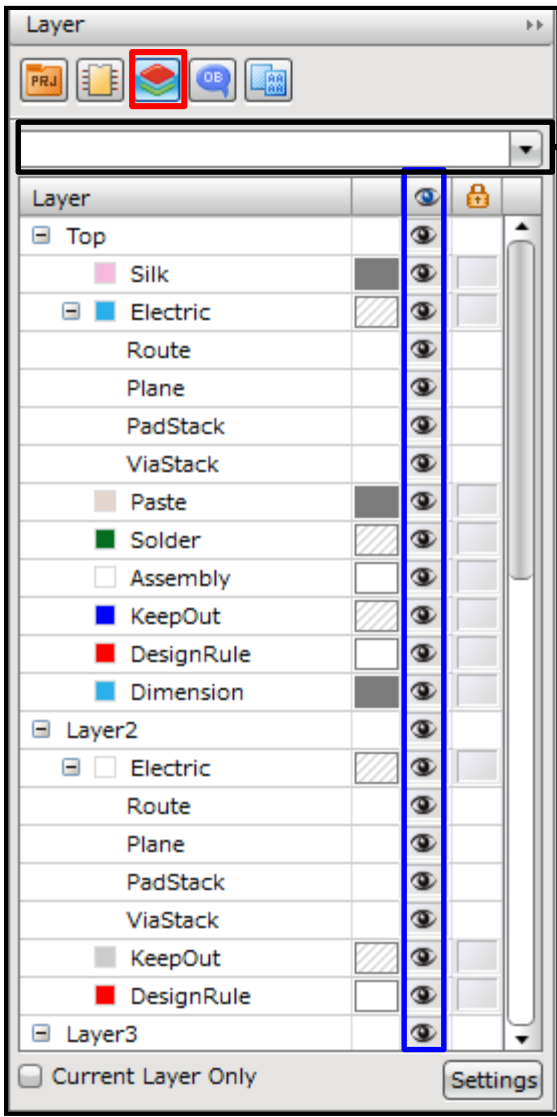
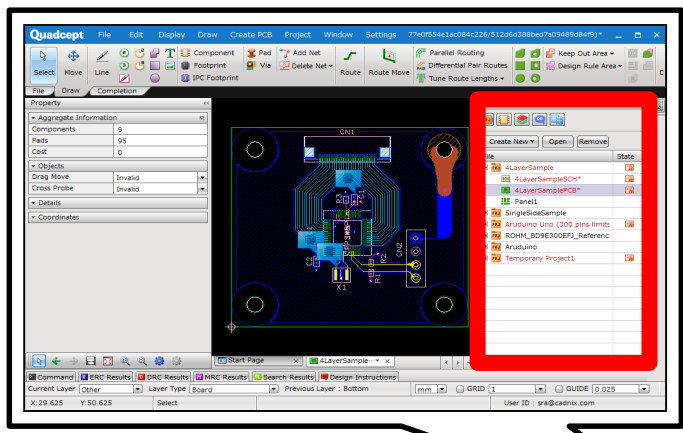
P C B

5. PCB – Grid

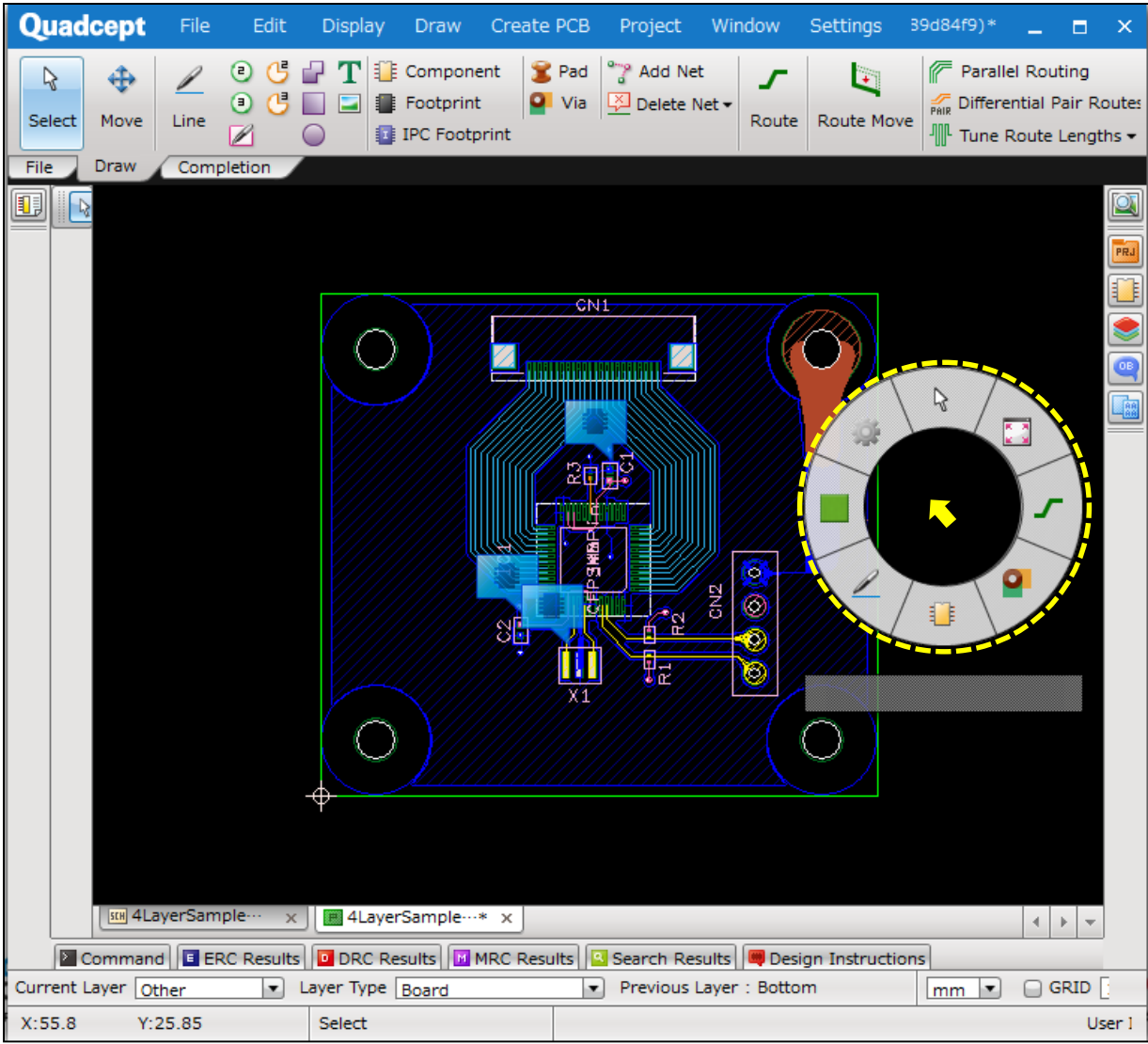


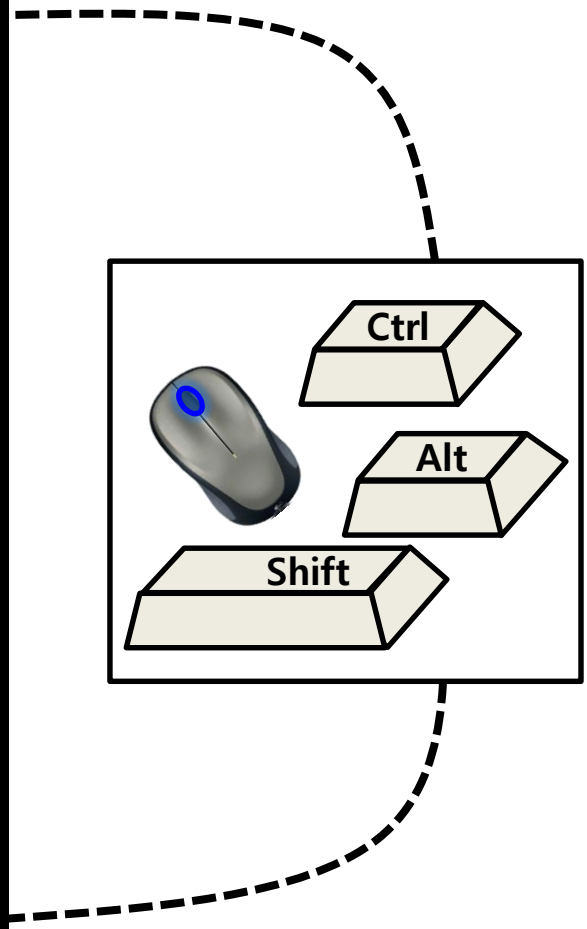
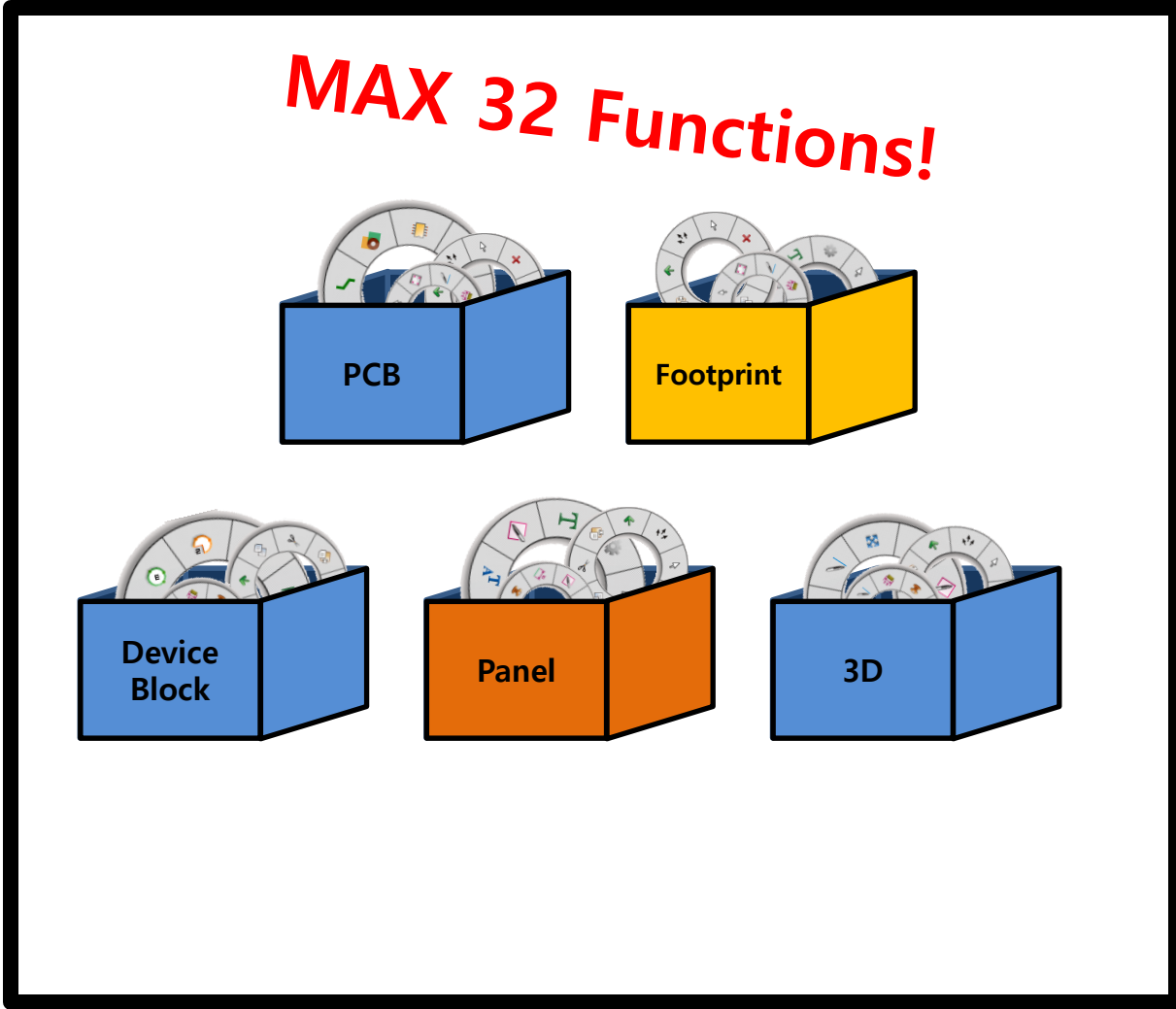
The screenshot shows the Quadcept PCB software interface. The main workspace is a dark grid. A yellow arrow points to the word "GRID" in yellow text, and a blue arrow points to the word "GUIDE" in blue text. The bottom status bar contains a red-bordered box with the following settings: "mm" (units), "GRID 1" (checked), and "GUIDE 0.5" (checked). The top menu bar includes File, Edit, Display, Draw, Create PCB, Project, Window, and Settings. The toolbar contains various tools like Select, Move, Line, Component, Pad, Add Net, Delete Net, Route, Route Move, Parallel Routing, Differential Pair Routes, Tune Route Lengths, Keep Out Area, and Design Rule Area. The bottom status bar also shows "Current Layer: Other", "Layer Type: Board", "Previous Layer: Bottom", "X:36", "Y:-13", "Select", "Selecting: Plane ID = 698", and "User ID: sra@cadnix.com".

PCB – Layer

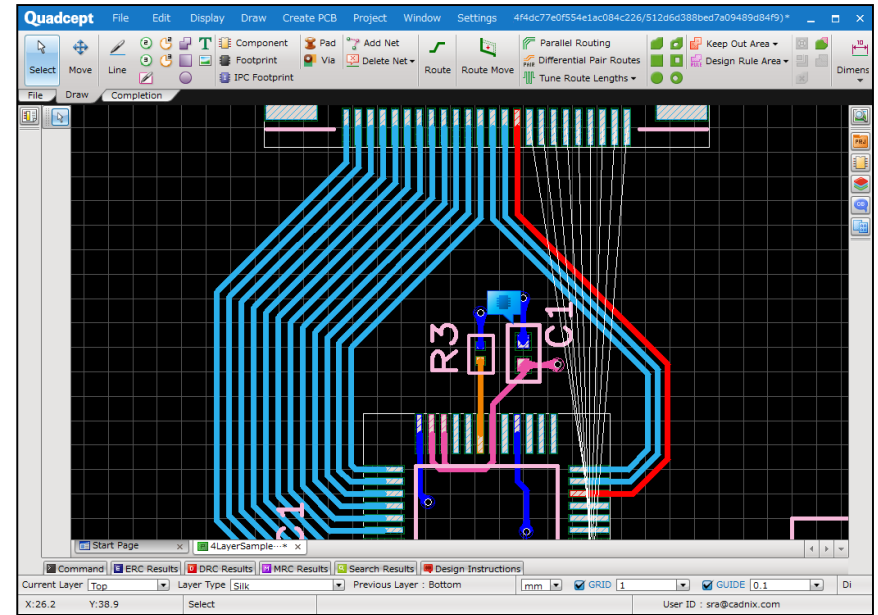
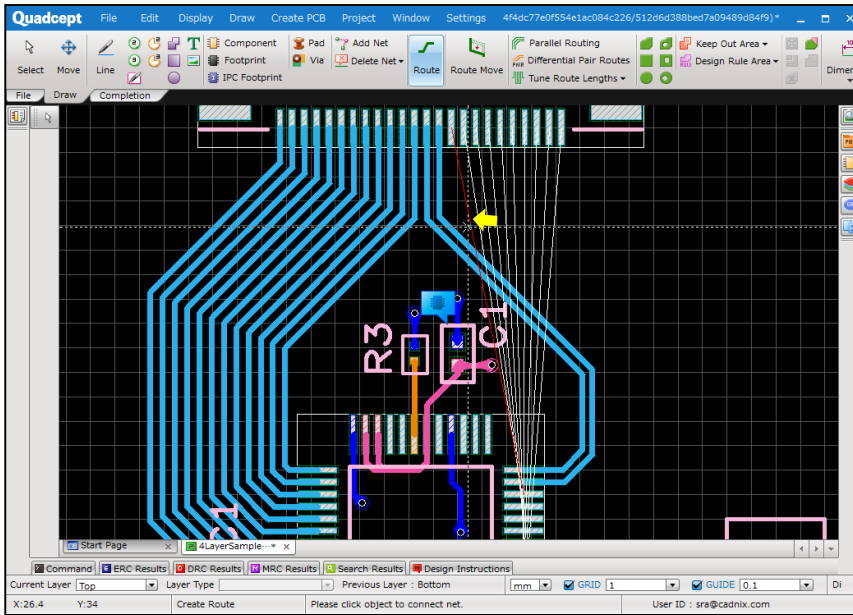


5. PCB – Stroke (1/2)

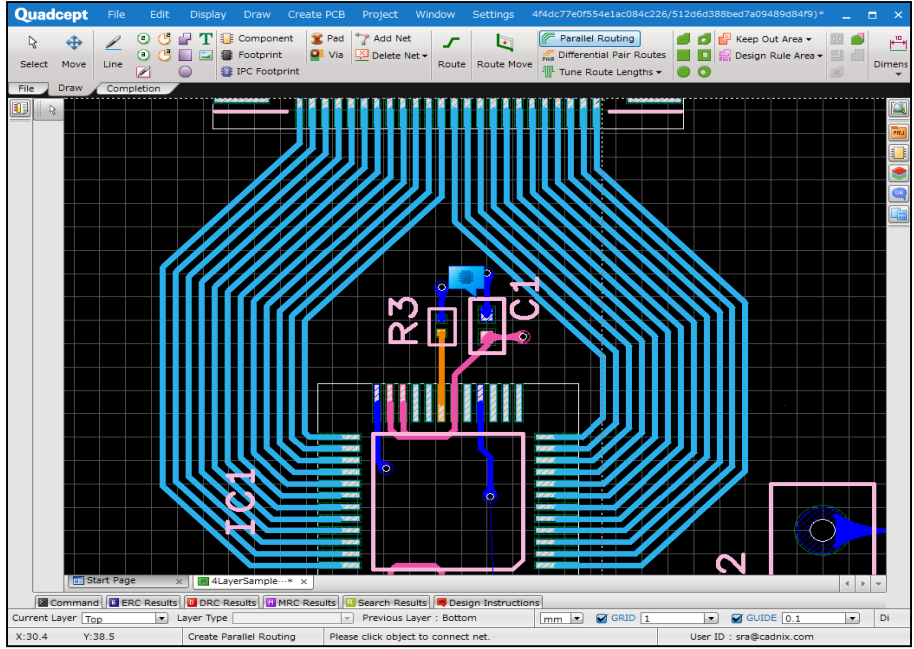
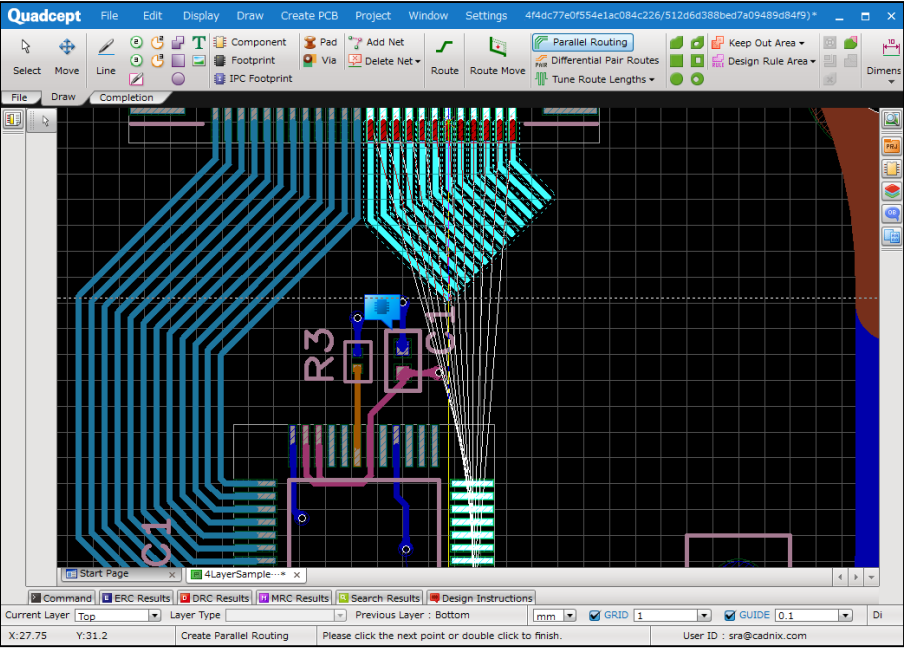




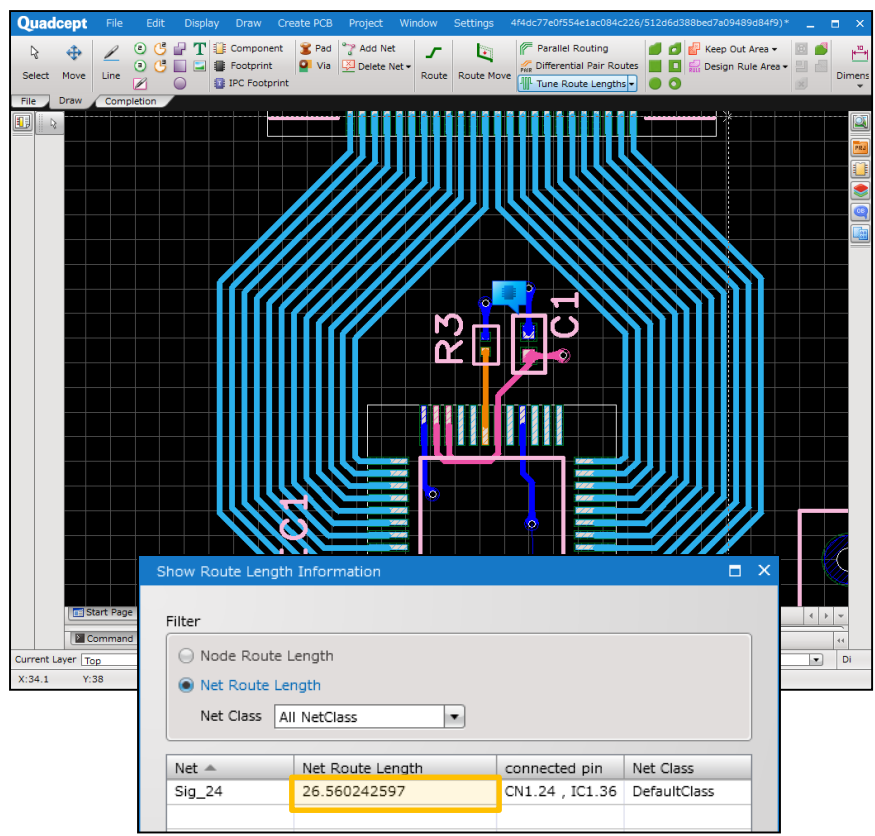
5. PCB – Routing (1/3)



5. PCB – Routing (2/3)

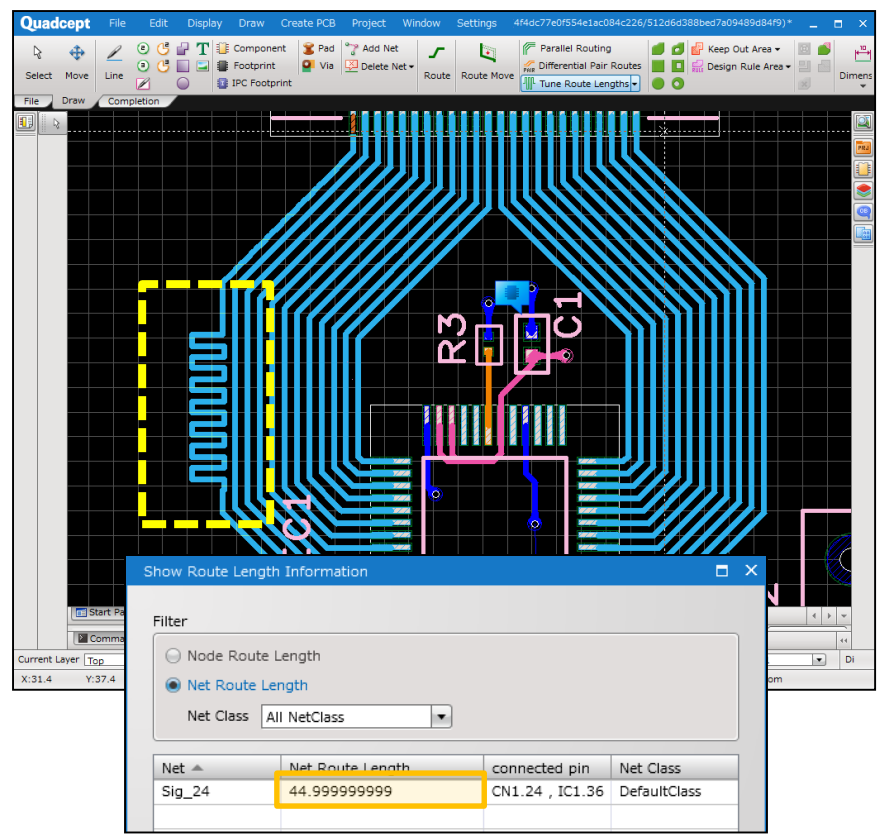


5. PCB – Routing (3/3)



Node Route Length
 Net Route Length
 Net Class: All NetClass

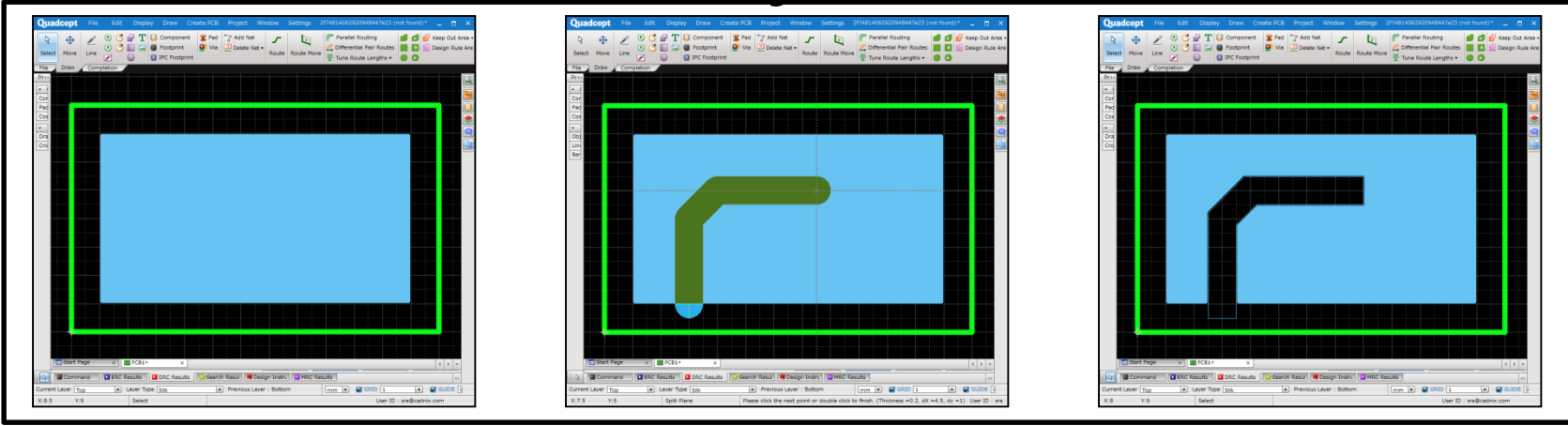
Net	Net Route Length	connected pin	Net Class
Sig_24	26.560242597	CN1.24 , IC1.36	DefaultClass



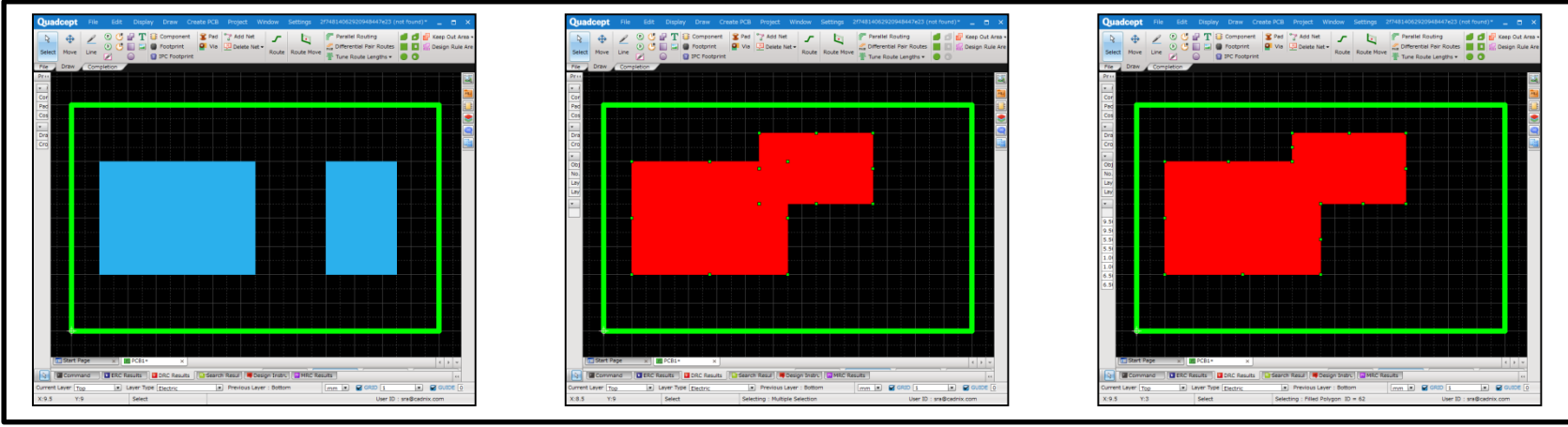
Node Route Length
 Net Route Length
 Net Class: All NetClass

Net	Net Route Length	connected pin	Net Class
Sig_24	44.999999999	CN1.24 , IC1.36	DefaultClass

Easy Cut!



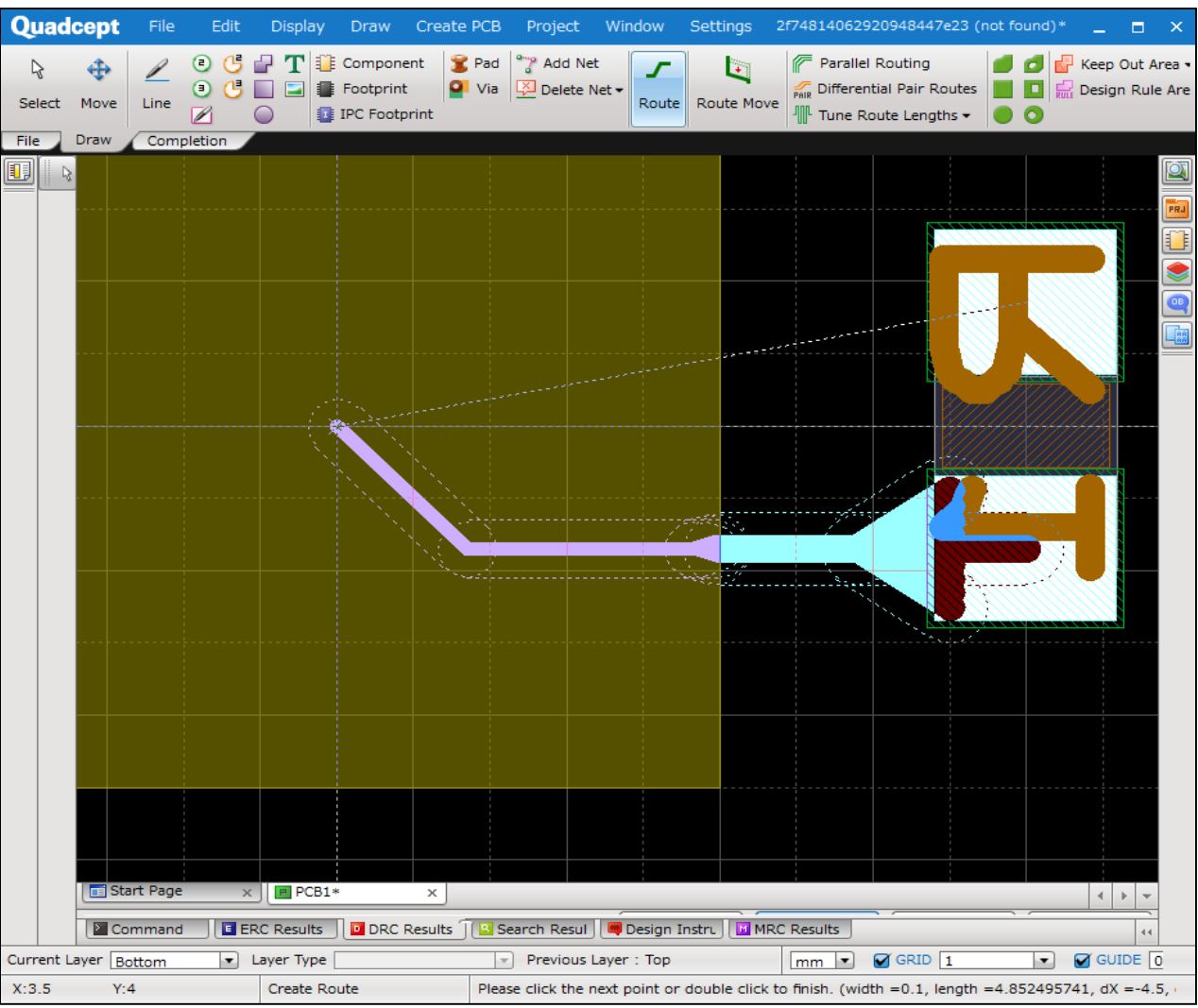
Easy Merge!



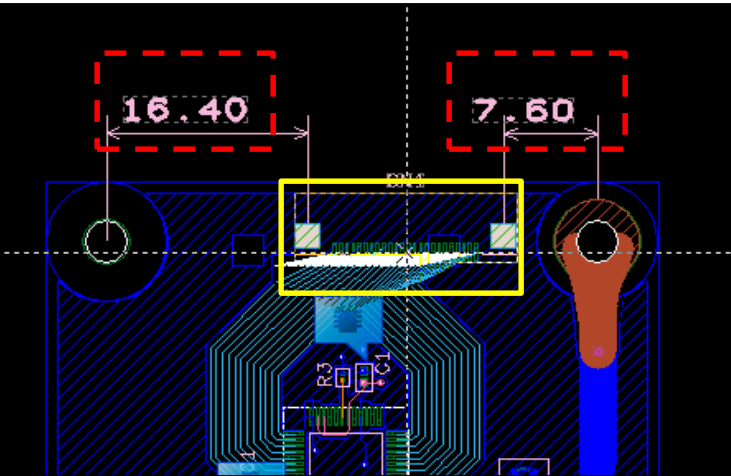
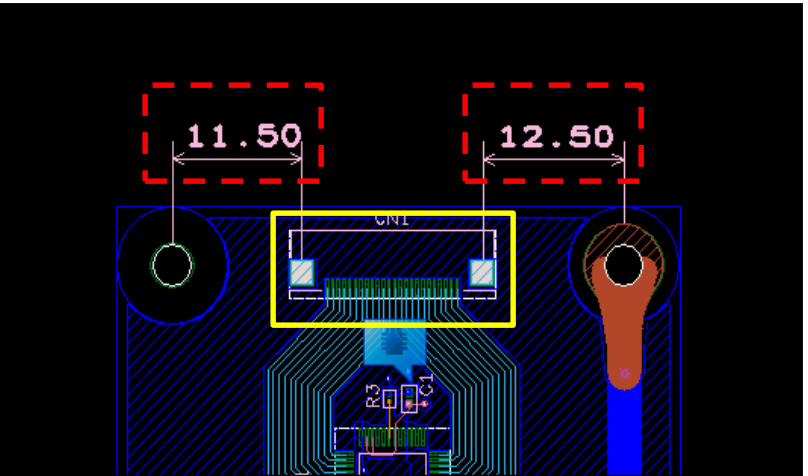
Easy Cut!



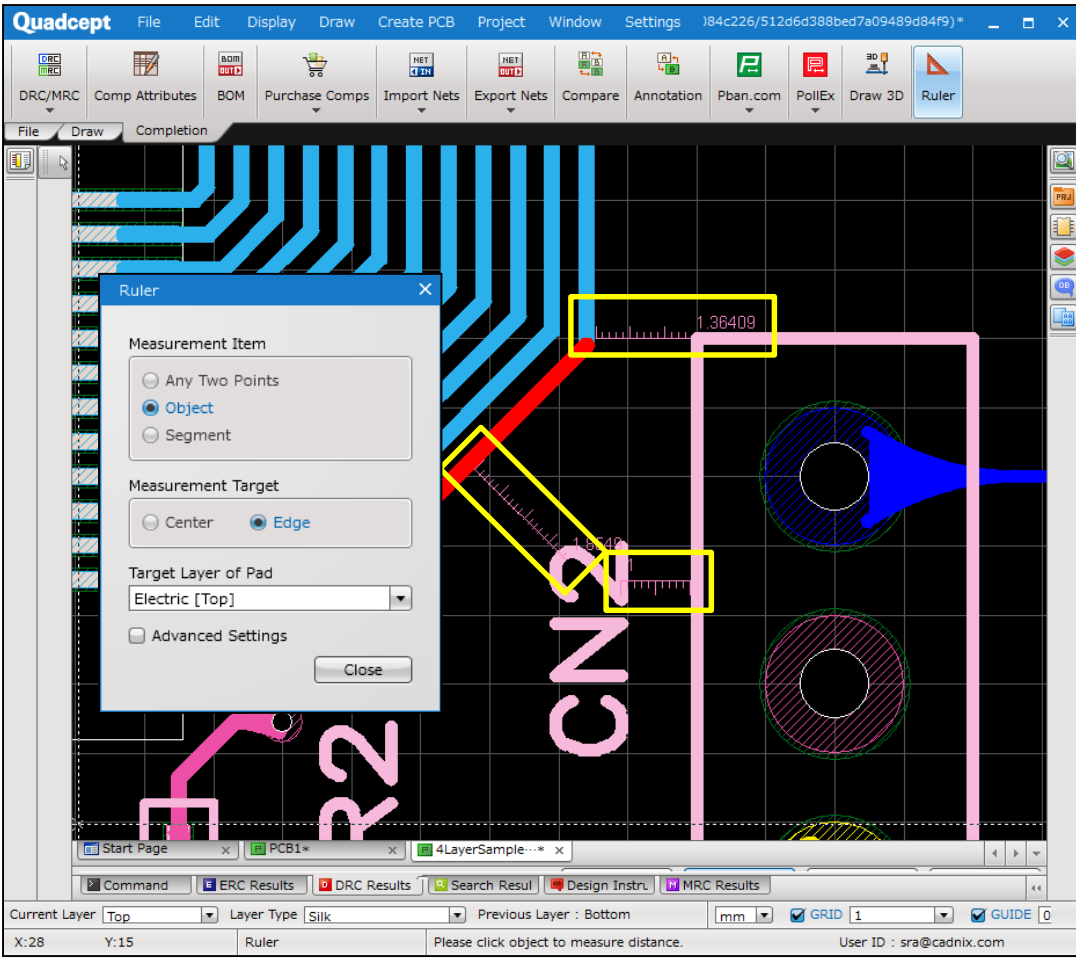
5. PCB – Design Rule Area



5. PCB – Dimension



5. PCB – Ruler



5. PCB – DRC

Run DRC/MRC

DRC Items

✓	Error Type	Type	Check Contents
✓	Error	Unconnected Net	Unconnected routes.
✓	Error	Clearance	Clearance rule.
✓	Error	Component Clearance	Assembly area clearance rule.
✓	Error	Via Rules	Via rule.
✓	Error	Route Width	Route width rule.
✓	Error	Route Length/Isometric Routing	Route length and isometric routing rule.
✓	Error	Differential Pair	Gap/route length/tolerance of differential pair.
✓	Error	Arc Route	If the edge shape of routes is arc.
✓	Error	Dangling Route	The existence of dangling routes.
✓	Error	Floating Via/Stub Via	The existence of floating via and stub via.
✓	Error	Route Angle	Unexpected route angle.
✓	Warning	Tear drop (Through)	The existence of tear drop of Through.
✓	Warning	Tear drop (SMD)	The existence of tear drop of SMD.
✓	Warning	Tear drop (Via)	The existence of tear drop of via.
✓	Error	Pad on Via	Via on SMD.
✓	Warning	Dynamic Plane is divided	If a dynamic plane is divided.
✓	Error	Polygon/Twisted Plane	The existence of twisted polygon/twisted plane.
✓	Error	Unconnected Plane	The existence of unconnected plane.
✓	Error	Kernel Cut Area	Kernel Cut Area.
✓	Error	T	
✓	Error	D	
✓	Error	E	

Settings

Project: PCB1

Route Length/Isometric Routing

Assignment: Advanced Settings

Settings

Detail/Setting

DDR1

DDR2

Set Route Length

Basic Route Length: 50

Tolerance: ± 0.50

Set Tolerance only

Tolerance: ± 0.50

NETCHANGER

Run DRC/MRC

MRC Items

✓	Error Type	Type	Check Contents
✓	Error	Clearance	Clearance rule.
✓	Error	Show Reference	All references are visible.
✓	Error	Reference Placement Angle	Reference placement angle.
✓	Error	Solder Resist/Paste	The existence of solder resist and paste.

Check Clearance of Displayed Objects only

Maximum No. of Errors: 100

DRC/MRC Settings

Run DRC/MRC

Run DRC

Run MRC

Cancel

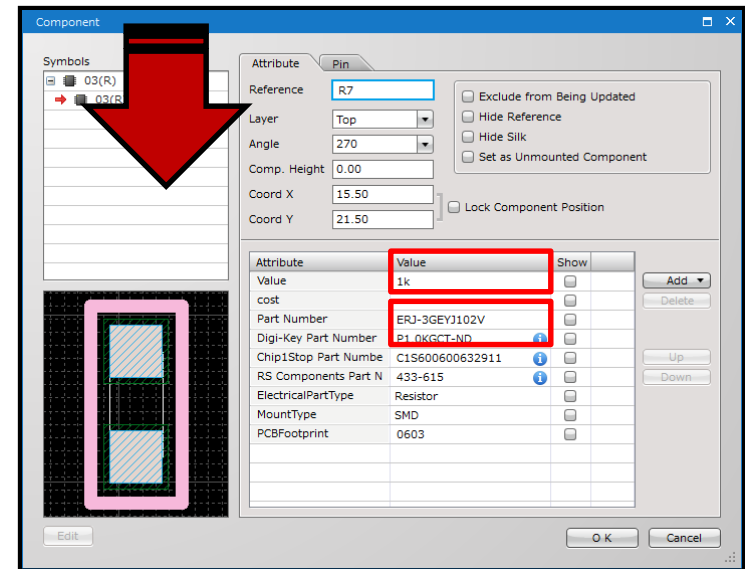
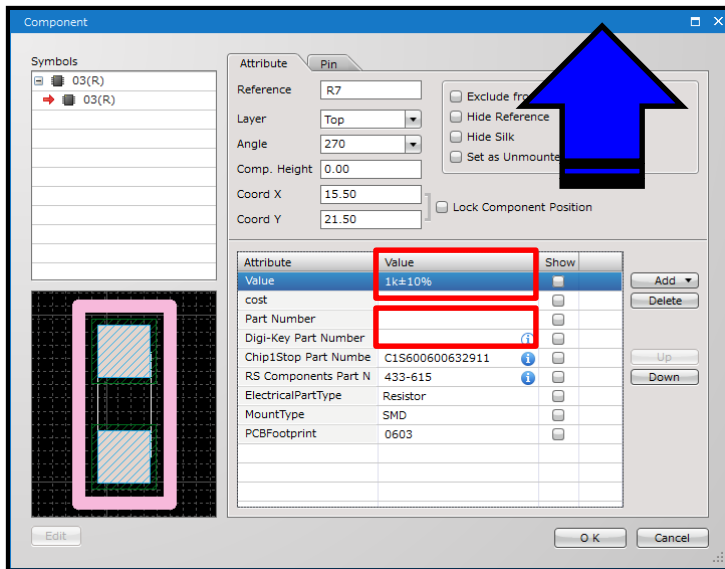
5. PCB – Component Attributes

Component Attributes List : ArduinoUnoRev3PCB[PCB]

Reference	Quantity	Value	NoMount	Part Number	Chip1Stop Part Number	Digi-Key Part Number	RS Components Part Nurr
JP2	1	2x2 M	<input type="checkbox"/>	PPTC022LFBN-R	C15732300084315	S7070-ND	
L_RX,TX	3	YELLOW	<input type="checkbox"/>	APT2012YC	C15410301883787	754-1135-1-ND	
L1	1		<input type="checkbox"/>	BLM21PG2215N	C15521301034173	490-1054-1-ND	724-1532
ON	1	GREEN	<input type="checkbox"/>	LGR971-KN-1-Z	C15543900031702	475-1410-1-ND	497-4668
PC1,PC2	2	47u	<input type="checkbox"/>	EMVA250ADA47	C15758600238155	565-2103-1-ND	756-7973
R1	1	1M	<input type="checkbox"/>	ERJ3GEYJ105V	C15600603154706	P1.0MGCT-ND	732-5668
R2	1	1M	<input type="checkbox"/>	ERJ3GEYJ105V	C15600603154706	P1.0MGCT-ND	732-5668
R3	1	10k	<input type="checkbox"/>	ERJ3GEYJ103V	C15600600055398	P10KGCT-ND	732-5656
R4,R5,R6	3	10k	<input type="checkbox"/>	ERJ3GEYJ103V	C15600600055398	P10KGCT-ND	433-738
R7	1	1k±10%	<input type="checkbox"/>	ERJ-3GEYJ102V	C1560060632911	P1.0KGTR-ND	433-615
R8	1	1k±10%	<input type="checkbox"/>	ERJ-3GEYJ102V	C1560060632911	P1.0KGCT-ND	433-615
RESET	1	TS42031-160R-TR	<input type="checkbox"/>	FSM1LPATR	C15757106708023	450-1760-1-ND	909-8028
RN2	1	1k	<input type="checkbox"/>	CAY16-102J4LF	C15134600310507	CAY16-102J4LFCT-ND	522-5579
RN3	1	22	<input type="checkbox"/>	CAY16-220J4LF	C15134600438982	CAY16-220J4LFCT-ND	522-5620
RN4	1	1k	<input type="checkbox"/>	CAY16-102J4LF	C15134600390406	CAY16-102J4LFCT-ND	522-5579
T1	1		<input type="checkbox"/>	FDN340P	C15226600576626	FDN340PCT-ND	671-0435
U1	1	NCP1117ST50T3G	<input type="checkbox"/>	NCP1117ST50T	C15541900483396	NCP1117ST50T3GOS	802-2130
U2	1		<input type="checkbox"/>	LP2985-33DBV	C15746200648465	296-18476-1-ND	
U3	1		<input type="checkbox"/>	ATMEGA16U2-M	C15124600311378	ATMEGA16U2-MU-ND	715-3791
U5	1		<input type="checkbox"/>	LMV358IDGKR	C15746201988847	296-13455-1-ND	660-6727
X1	1	3184	<input type="checkbox"/>	PJ-102AH	C15158100003310	CP-102AH-ND	
X2	1		<input type="checkbox"/>	PN61729		609-3657-ND	771-0041
Y1	1	16MHz	<input type="checkbox"/>	ABL-16.000MHZ	C15101600035820	535-9041-ND	
Y2	1	16MHz	<input type="checkbox"/>	CSTCE16MOV53	C15521301054405	490-1198-1-ND	624-1077
Z1,Z2	2		<input type="checkbox"/>	CG0603MLC-05E	C15134600080554	CG0603MLC-05ECT-ND	851-8256
ZU4	1		<input type="checkbox"/>	ATMEGA328P-PL	C15124600175572	ATMEGA328P-PU-ND	696-2260

Display Options: Group Same Attributes, Citation [R1,R2,R3,U1,U2], Group [R1-3,U1-2]

Buttons: Import/Export, Close




5. PCB – Purchase Comps


Purchase Comps : Arduino Uno (300 pins limits)_SCH

Distributor: **Chip1Stop** **Digi-Key** **RS Components**

Order	Digi-Key Part Number	References	NoMount	Qty	Manufacturer Part Number	Available Qty	Unit Price	Extended Price	MOQ
✓	P1.0KGCT-ND	R7,R8	<input type="checkbox"/>	2	ERJ-3GEYJ102V	30766	122.000C	244.00000	1
✓	P1.0MGCT-ND	R1,R2	<input type="checkbox"/>	2	ERJ-3GEYJ105V	71423	122.000C	244.00000	1
✓	P10KGCT-ND	R4,R5,R6	<input type="checkbox"/>	3	ERJ-3GEYJ103V	0	122.000C	366.00000	1
✓	P10KGCT-ND	R3	<input type="checkbox"/>	1	ERJ-3GEYJ103V	0	122.000C	122.00000	1
✓	ATMEGA16U2-MU-ND	U3	<input type="checkbox"/>	1	ATMEGA16U2-MU	21987	3,084.00	3,084.00000	1
✓	FDN340PCT-ND	T1	<input type="checkbox"/>	1	FDN340P	34217	502.000C	502.00000	1
✓	NCP1117ST50T3GOSCT-ND	U1	<input type="checkbox"/>	1	NCP1117ST50T3G	42901	612.000C	612.00000	1
✓	CAY16-102J4LFACT-ND	RN2	<input type="checkbox"/>	1	CAY16-102J4LF	28610	122.000C	122.00000	1
✓	RHM0.0ARCT-ND	GROUND,RES	<input type="checkbox"/>	2	MCR10EZPJ000	1828359	122.000C	244.00000	1
✓	S7070-ND	JP2	<input type="checkbox"/>	1	PPTC022LFBN-RC	4895	918.000C	918.00000	1
✓	CAY16-102J4LFACT-ND	RN4	<input type="checkbox"/>	1	CAY16-102J4LF	28610	122.000C	122.00000	1
✓	490-1550-1-ND	C3,C8	<input type="checkbox"/>	2	GRM188R60J105KA01D	304721	122.000C	244.00000	1
✓	296-18476-1-ND	U2	<input type="checkbox"/>	1	LP2985-33DBVR	58283	710.000C	710.00000	1
✓	MF-MSMF050-2CT-ND	F1	<input type="checkbox"/>	1	MF-MSMF050-2	89824	281.000C	281.00000	1
✓	490-1054-1-ND	L1	<input type="checkbox"/>	1	BLM21PG221SN1D	832652	122.000C	122.00000	1
✓	609-3218-ND	ICS9,ICSP1	<input type="checkbox"/>	2	67996-406HLF	18733	330.000C	660.00000	1
✓	CAY16-220J4LFACT-ND	RN3	<input type="checkbox"/>	1	CAY16-220J4LF	7100	196.000C	196.00000	1
✓	CD1206-S01575CT-ND	D2,D3	<input type="checkbox"/>	2	CD1206-S01575	169120	196.000C	392.00000	1
✓	311-1344-1-ND	C1,C2,C4,C5,	<input type="checkbox"/>	6	CC0603KRX7R9BB104	4076402	122.000C	732.00000	1
✓	S7006-ND	IOL,POWER	<input type="checkbox"/>	2	PPTC081LFBN-RC	47300	1,052.00	2,104.00000	1
✓	754-1135-1-ND	L,RX,TX	<input type="checkbox"/>	3	APT2012YC	23772	477.000C	1,431.00000	1
✓	EGF1T-E3/67AGICT-ND	D1	<input type="checkbox"/>	1	EGF1T-E3/67A	1355	685.000C	685.00000	1
✓	475-1410-1-ND	ON	<input type="checkbox"/>	1	LG R971-KN-1	574912	306.000C	306.00000	1
✓	450-1760-1-ND	RESET	<input type="checkbox"/>	1	FSM1LPATR	34127	392.000C	392.00000	1
✓	CP-102AH-ND	X1	<input type="checkbox"/>	1	PJ-102AH	57754	930.000C	930.00000	1
✓	709-1143-1-ND	C9,C11	<input type="checkbox"/>	2	S00R14N220JV4T	104799	122.000C	244.00000	1
✓	535-9041-ND	Y1	<input type="checkbox"/>	1	ABL-16.00MHZ-B2	0	215.361C	215.36100	100
✓	S7008-ND	IOH	<input type="checkbox"/>	1	PPTC101LFBN-RC	22322	991.000C	991.00000	1
✓	S7004-ND	AD	<input type="checkbox"/>	1	PPTC061LFBN-RC	16933	832.000C	832.00000	1
✓	296-13455-1-ND	U5	<input type="checkbox"/>	1	LMV358IDGKR	25661	942.000C	942.00000	1
✓	490-1198-1-ND	V2	<input type="checkbox"/>	1	CSTCE16M0V53-R0	81628	612.000C	612.00000	1

No. of Set: *Please specify the number of sets you want to purchase.

Country:  South Korea (KRW)



Total **₩25,524.37**

[Digi-Key BOM](#)

[Add To Cart](#)

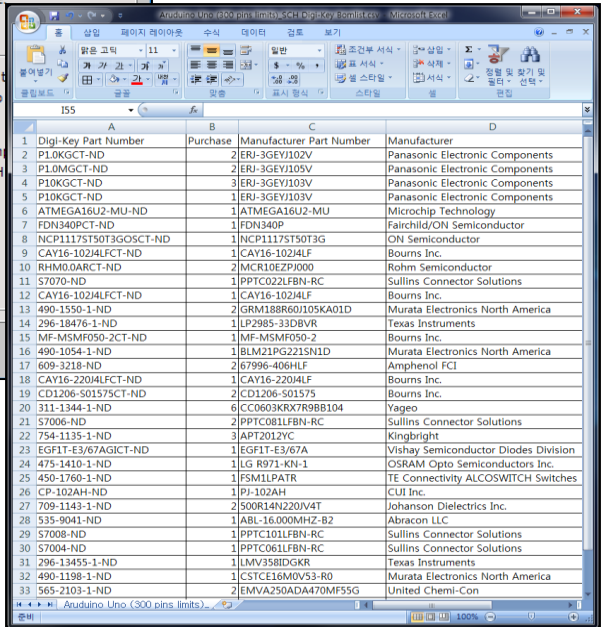
*The indicated price is for reference. Please confirm the current price/stock directly at the website.

Description

Part numbers need to be registered with components to be purchased.

How to Register

- Register with Components
- Register from Schematic

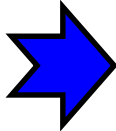
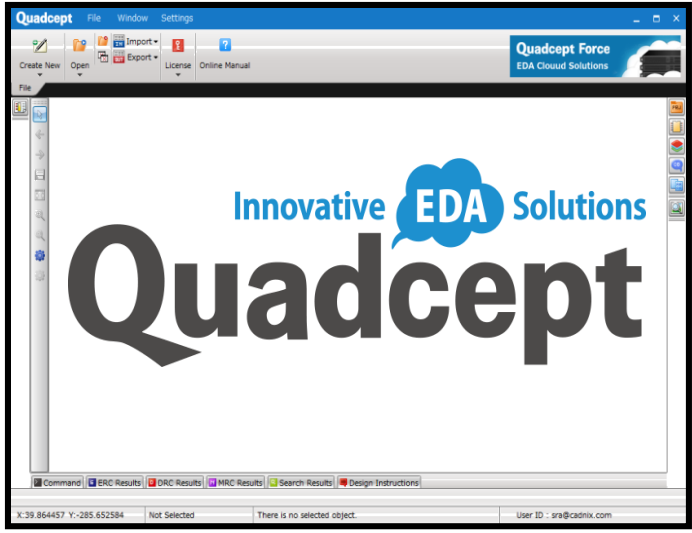


Digi-Key Part Number	Purchase	Manufacturer Part Number	Manufacturer
1 P1.0KGCT-ND	2	ERJ-3GEYJ102V	Panasonic Electronic Components
2 P1.0MGCT-ND	2	ERJ-3GEYJ105V	Panasonic Electronic Components
3 P10KGCT-ND	3	ERJ-3GEYJ103V	Panasonic Electronic Components
4 P10KGCT-ND	1	ERJ-3GEYJ103V	Panasonic Electronic Components
5 ATMEGA16U2-MU-ND	1	ATMEGA16U2-MU	Microchip Technology
6 FDN340PCT-ND	1	FDN340P	Fairchild/ON Semiconductor
7 NCP1117ST50T3GOSCT-ND	1	NCP1117ST50T3G	ON Semiconductor
8 CAY16-102J4LFACT-ND	1	CAY16-102J4LF	Bourns Inc.
9 RHM0.0ARCT-ND	2	MCR10EZPJ000	Rohm Semiconductor
10 S7070-ND	1	PPTC022LFBN-RC	Sullins Connector Solutions
11 CAY16-102J4LFACT-ND	1	CAY16-102J4LF	Bourns Inc.
12 490-1550-1-ND	2	GRM188R60J105KA01D	Murata Electronics North America
13 296-18476-1-ND	1	LP2985-33DBVR	Texas Instruments
14 MF-MSMF050-2CT-ND	1	MF-MSMF050-2	Bourns Inc.
15 490-1054-1-ND	1	BLM21PG221SN1D	Murata Electronics North America
16 609-3218-ND	2	67996-406HLF	Amphenol FCI
17 CAY16-220J4LFACT-ND	1	CAY16-220J4LF	Bourns Inc.
18 CD1206-S01575CT-ND	2	CD1206-S01575	Bourns Inc.
19 311-1344-1-ND	6	CC0603KRX7R9BB104	Yageo
20 S7006-ND	2	PPTC081LFBN-RC	Sullins Connector Solutions
21 754-1135-1-ND	3	APT2012YC	Kingbright
22 EGF1T-E3/67AGICT-ND	1	EGF1T-E3/67A	Vishay Semiconductor Diodes Division
23 475-1410-1-ND	1	LG R971-KN-1	OSRAM Opto Semiconductors Inc.
24 450-1760-1-ND	1	FSM1LPATR	TE Connectivity ALCOSWITCH Switches
25 CP-102AH-ND	1	PJ-102AH	CUI Inc.
26 709-1143-1-ND	2	S00R14N220JV4T	Johanson Dielectrics Inc.
27 535-9041-ND	1	ABL-16.00MHZ-B2	Abracon LLC
28 S7008-ND	1	PPTC101LFBN-RC	Sullins Connector Solutions
29 S7004-ND	1	PPTC061LFBN-RC	Sullins Connector Solutions
30 S7004-ND	1	LMV358IDGKR	Texas Instruments
31 296-13455-1-ND	1	LMV358IDGKR	Texas Instruments
32 490-1198-1-ND	1	CSTCE16M0V53-R0	Murata Electronics North America
33 565-2103-1-ND	2	EMVA250ADA470MF55G	United Chemi-Con

VERIFICATION

With PolliEx

6. Verification – DFM/DFE



6. Verification – PollEx PCB

