PCB Layout CAD Functional Comparison

	Quadcept PCB Designer Community	Quadcept PCB Designer Professional	A	B	C
Upfront cost (JPY)	Free	0	900,000	8,000,000～10,000,000	900,000
Annual Maintenance Fee		0	10～15%	10%	10～15%
Monthly Fee		$99.00 (USD)	—	—	—
Type	Non-Commercial	Commercial	—	—	—
Target	Student, Hobbyist	Companies, Educational Institutions, Individual	—	—	—
Support	Online Manual Forum	Online Manual Forum （Priority Support) Accommodation Email Desk	Manual TEL/Mail (maintenance contract user only)	Manual TEL/Mail (maintenance contract user only)	Manual TEL/Mail (maintenance contract user only)
Version-Up and provide patch program	●	●	●	●	●
■System					
OS	Windows Vista7/8/10	Windows Vista7/8/10	Windows7/8 Windows Vista Windows XP	Windows7/8 Windows Vista Windows XP	Windows7/8/10 Windows Vista Windows XP
Auto backup	●	●	●	● (Log filed type)	●
Undo/Redo	●	●	●	●	●
maximum Layers of routing	4	Unlimted	30	128	64L （32 signal/16 internal plane /16 Mechanical)
number of maximum pads	1000	Unlimted	—	Unlimted	—
number of maximum components	Depend on pads	Unlimted	—	Unlimted	—
number of maximum nets	Depend on pads	Unlimted	1500 Connection	Unlimted	—
Authentication Method	Online	Online / Offline	USB-Key (Dongle)	USB-Key (Dongle)	USB-Key (Dongle)
Switch Authentication （Online to Offline)	×	●	×	×	×
Changing Save Location of Design Data	×	●			
Create component library service	×	●			
Free component library [Quadcept Share]	● 250,000 Free component Library	● 250,000 Free component Library	OP	OP	OP
Customization of ribbon menu	●	●	×	×	×
Customization of toolbar and menu	●	●	×	×	×
Function of shortcut customization	●	●	×	×	×
Stroke function	●	●	×	—	×
Customization of Stroke function	●	●	×	—	×
Show Fill of object	●	●	●	●	—
Show Outline of object	●	●	●	●	●
Simultaneous Show of GRID/SNAP	●	●	●	●	×
Show drill holes	●	●	●	●	●
Show thermal shapes of inner layers	●	●	●	●	●
Show net name on the pin	●	●	—	●	●
Show pint number on the pin	●	●	—	●	●
■Net Information					
Color specify of net unit	●	●	●	●	—
Color specify output of net unit	●	●	●	●	—
Route width specify of net unit	●	●	●	●	●
Route layer specify of net unit	●	●	●	●	—
Via assign of net unit	●	●	●	●	●
Show/Hide setting of net unit	●	●	●	●	—
Add net or delete on the screen	●	●	●	●	—
■Place component					
Place by input coordinate value	●	●	●	●	●
Minimum angle of rotation	0.00001	0.00001	0.1	0.00001	—
Offset move/copy (relative coordinate)	●	●	×	●	×
Rotational Move	●	●	●	●	●
Mirror place	●	●	●	●	●
Lock place position	●	●	●	●	●

Object array	●	●	●	×	●
Automatic parts create wizard（IPC support）	×	●	●	OP	●
Automatic addition of test point	×	●	×	●	−
■ Route function					
Route Re-route	●	●	●	●	●
45 degrees Route	●	●	●	●	●
90 degrees Route	●	●	●	●	●
Lead in	●	●	×	●	×
Free angle Route	●	●	●	●	●
Route any specified angle	●	●	●	●	●
Change line width at routing	●	●	●	●	×
Tapered route	●	●	×	●	×
Tear Drop	●	●	●	●	●
Single point ground	●	●	×	●	×
Swap pin	●	●	●	●	●
Bundle route function（Parallel route）	×	●	×	●	●
Impedance calibration routing	×	●	OP	OP	−
Differential pair routing	×	●	×	OP	●
Tuning of route length	×	●	×	OP	×
Specified route length	×	●	OP	OP	●
Equal length routing	×	●	OP	OP	●
■ Draw function					
Automatic plane	●	●	●	●	●
Arc plane	●	●	●	●	●
Cut plane	●	●	●	●	●
Change shape of plane (specified)	●	●	×	●	−
Merge plane	●	●	×	●	×
Division polygon	●	●	×	●	×
Trimming（C-cut/Arc/90 degrees）	●	●	×	●	●
Offset line	●	●	×	●	×
Object array	●	●	×	●	×
Insert image file	●	●	−	●	−
Various dimension	●	●	●	●	●
Create Board Outline Dimension Automatically	×	●	×	×	×
Board Slit	×	●	×	×	×
■ Check function					
Basic Design rule check (DRC)	●	●	●	●	●
MRC（DFM）	×	●	OP	OP	×
Design rule customization	×	●	×	OP	×
Design direction	×	●	×	●	×
Design direction balloon display	×	●	×	×	×
Online DRC	●	●	×	●	●
Show/Check Clearance	●	●	×	●	●
Keep Out Area setting	●	●	×	●	●
Automatic creation of Keep Out Area	×	●	×	×	×
Inner layer DRC	●	●	●	●	●
Net class DRC	●	●	OP	●	●
■ Data I/O					
Export to Printer	●	●	●	●	●
Export Gerber data	●	●	●	●	●
Import Gerber data	●	●	×	●	−
Export DRILL data	●	●	●	●	●
Export component list (CSV)	●	●	●	●	●
Cross probing with schematic	●	●	●	●	●
Export ODB++	×	●	×	OP	●
Data annotation of old/new	×	●	×	×	×

All batch print（GERBER/PDF/print/etc.)	×	●	×	OP	×
Panelling	×	●	●	OP	×
3D I/O（STEP/IDF）	×	●	OP	OP	●
DXF I/O	×	●	●	OP	●
Export DSN	×	●	●	OP	●
Connect to PollEx	×	●	×	×	×
Converter	×	●	−	−	−
Back annotation to schematic（Auto）	×	●	●	●	●
Back annotation to schematic（Manual）	●	●	×	●	×
Export of opposite netlist	●	●	●	●	−

※ ×/− :（not supported or unclear）
※ No part of this document may be copied or used without permission
※Please be understanding that some function of each CAD may be resolved.
※This comparison is based on its own research by Quadcept.