

# Line up of conventional PWBs

<http://www.cmk-corp.com>

## IVH multilayer PWB



### Features

Suitable for up to 18 layers structures.  
Surface mounting by chip on via is available.  
Applicable for narrow pitch CSP mounting.  
Suitable for composite IVH, which allows for a wide variety of products.  
Through CMK's capability in circuit design and production process management, we are able to follow customer's requirements in impedance control.  
E-spec products: Environment-friendly products. "E-spec" is available upon request.

### Applications

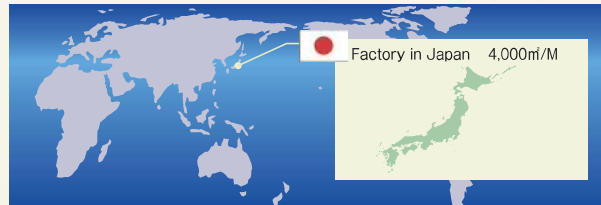
- Automotive: Engine control etc.
- IT device: Mobile phone, PDA, etc.
- Office machine: copy machine, fax machine, etc.
- PC related device: Desktop, Notebook, Matherboard, HDD, printer, etc.

### Specifications

Items	Min. thickness, mm (finished)	Line/space, um	Hole dia./land dia. (External layer), um	Hole dia./land dia. (Internal layer), um
Standard	IVH	100 / 100	200 / 500	200 / 500
	PTH	100 / 100	300 / 600	300 / 600
Fine	IVH	80 / 100	150 / 400	150 / 400
	PTH	100 / 100	200 / 450	200 / 500

### Manufacturing location

Monthly production volume(group total) 4,000mi



## Double-sided through hole PWB



### Features

Uses CEM-3 or FR-4 base material, and has excellent heat resistance and electrical properties.  
Through CMK's capability in circuit design and production process management, we are able to follow customer's requirements in impedance control.  
Globally manufactured in Japan and China, and large quantities of products can be supplied in a short period regardless of inside outside japan.  
E-spec products: Environment-friendly products. "E-spec" is available upon request.

### Applications

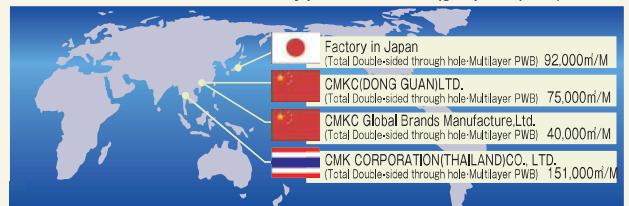
- Automotive: Engine control etc.
- Office machine: copy machine, fax machine, etc.
- PC related device: HDD, printer, etc.

### Specifications

Items	Thickness, mm	Line/space, um	Hole dia./land dia. um
Standard	0.2 (min) ~ 1.6 (max)	150 / 150	400 / 700
Fine	0.2 (min) ~ 1.2 (max)	60 / 60	250 / 500

### Manufacturing location

Monthly production volume(group total) 358,000mi



## Multilayer



### Features

Suitable for up to 16 layers structures.  
Uses FR-4 base material, and has excellent heat resistance and electrical properties.  
Applicable for narrow pitch CSP mounting.  
Main applications: PC, mobile phone, automotive devices, multi-funton electronic devices.  
Through CMK's capability in circuit design and production process management, we are able to follow customer's requirements in impedance control.  
Through global manufacturing sites and logistic channels, we are able to correspond on-time delivery worldwide.  
E-spec products: Environment-friendly products. "E-spec" is available upon request.

### Applications

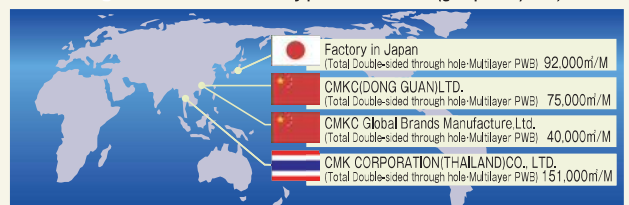
- Automotive: Engine control etc.
- Office machine: copy machine, fax machine, etc.
- PC related device: PC Matherboard, HDD, printer, etc.

### Specifications

Items	Thickness, mm	Line/space, um	Hole dia./land dia., um
Standard	0.4 (min) ~ 1.6 (max)	150 / 150	400 / 700
Fine	0.25 (min) ~ 1.2 (max)	60 / 60	250 / 500

### Manufacturing location

Monthly production volume(group total) 358,000mi



## Production capacity

Products	Production sites	Capacity
IVH multilayer PWB	Japan	4,000 m <sup>2</sup> /M
Double-sided-multilayer PWB	China  Japan  Thailand	337,000 m <sup>2</sup> /M

Products	Production sites	Capacity
Cu Base PWB	Japan	—
PPBU	China  Japan  Thailand	70,000 m <sup>2</sup> /M
Rigid-Flex PWB	Japan	6,000 m <sup>2</sup> /M

