

WE direkt: Overview of the ordering options 1/2



	Rigid PCBs (Pool)	Rigid PCBs (Non-Pool)	HDI (1-x-1) without Buried Via	HDI (1-xb-1) with Buried Via	Flex 1F	Flex 2F
min. PCB / panel size	30mm x 15mm	30mm x 15mm	30mm x 15mm	30mm x 15mm	30mm x 15mm (only as a panel)	30mm x 15mm (only as a panel)
max. PCB / panel size	426mm x 271mm	426mm x 271mm	426mm x 271mm	426mm x 271mm	426mm x 271mm	426mm x 271mm
material type	TG 150	TG 150	TG 150	TG 150	Polyimid (glueless)	Polyimid (glueless)
number of layers	1 - 8 layer	1 - 16 layer	4 - 8 layer	4 - 8 layer	1 layer	2 layer
thickness	<ul style="list-style-type: none"> • 0.80mm • 1.00mm • 1.55mm • 2.40mm 	<ul style="list-style-type: none"> • 0.50mm • 0.80mm • 1.00mm • 1.55mm • 2.00mm • 2.40mm • 3.20mm 	<ul style="list-style-type: none"> • 0.50mm • 0.80mm • 1.00mm • 1.55mm 	<ul style="list-style-type: none"> • 0.80mm • 1.00mm • 1.55mm 	0.12mm	0.17mm
structures outside / inside	<ul style="list-style-type: none"> • $\geq 192\mu\text{m}$ (required for $70\mu\text{m}$) • $\geq 150\mu\text{m}$ • $\geq 125\mu\text{m}$ • $\geq 100\mu\text{m}$ (not conform to IPC) 	<ul style="list-style-type: none"> • $\geq 250\mu\text{m}$ (required for $105\mu\text{m}$) • $\geq 192\mu\text{m}$ (required for $70\mu\text{m}$) • $\geq 150\mu\text{m}$ • $\geq 125\mu\text{m}$ • $\geq 100\mu\text{m}$ (not conform to IPC) • $\geq 85\mu\text{m}$ (required for $18\mu\text{m}$) 	<ul style="list-style-type: none"> • $\geq 250\mu\text{m}$ (required for $105\mu\text{m}$) • $\geq 192\mu\text{m}$ (required for $70\mu\text{m}$) • $\geq 150\mu\text{m}$ • $\geq 125\mu\text{m}$ • $\geq 100\mu\text{m}$ (not conform to IPC) 	<ul style="list-style-type: none"> • $\geq 250\mu\text{m}$ (required for $105\mu\text{m}$) • $\geq 192\mu\text{m}$ (required for $70\mu\text{m}$) • $\geq 150\mu\text{m}$ • $\geq 125\mu\text{m}$ • $\geq 100\mu\text{m}$ (not conform to IPC) 	<ul style="list-style-type: none"> • $\geq 150\mu\text{m}$ • $\geq 125\mu\text{m}$ • $\geq 100\mu\text{m}$ (not conform to IPC) 	<ul style="list-style-type: none"> • $\geq 150\mu\text{m}$ • $\geq 125\mu\text{m}$ • $\geq 100\mu\text{m}$ (not conform to IPC)
copper outside / inside	<ul style="list-style-type: none"> • $35\mu\text{m}$ • $70\mu\text{m}$ 	<ul style="list-style-type: none"> • $18\mu\text{m}$ (no galvanic metalization) • $35\mu\text{m}$ • $70\mu\text{m}$ • $105\mu\text{m}$ 	<ul style="list-style-type: none"> • $35\mu\text{m}$ 	<ul style="list-style-type: none"> • $35\mu\text{m}$ 	<ul style="list-style-type: none"> • $18\mu\text{m}$ • $35\mu\text{m}$ 	<ul style="list-style-type: none"> • $18\mu\text{m}$ (no galvanic metalization) • $35\mu\text{m}$
finished hole diameter	<ul style="list-style-type: none"> • $\geq 0.25\text{mm}$ (Pad $\geq 0.60\text{mm}$) • $\geq 0.10\text{mm}$ (Pad $\geq 0.45\text{mm}$) 	<ul style="list-style-type: none"> • $\geq 0.25\text{mm}$ (Pad $\geq 0.60\text{mm}$) • $\geq 0.10\text{mm}$ (Pad $\geq 0.45\text{mm}$) 	<ul style="list-style-type: none"> • $\geq 0.25\text{mm}$ (Pad $\geq 0.60\text{mm}$) • $\geq 0.10\text{mm}$ (Pad $\geq 0.45\text{mm}$) 	<ul style="list-style-type: none"> • $\geq 0.25\text{mm}$ (Pad $\geq 0.60\text{mm}$) • $\geq 0.10\text{mm}$ (Pad $\geq 0.45\text{mm}$) 	<ul style="list-style-type: none"> • $\geq 0.25\text{mm}$ (Pad $\geq 0.60\text{mm}$) • $\geq 0.10\text{mm}$ (Pad $\geq 0.45\text{mm}$) 	<ul style="list-style-type: none"> • $\geq 0.25\text{mm}$ (Pad $\geq 0.60\text{mm}$) • $\geq 0.10\text{mm}$ (Pad $\geq 0.45\text{mm}$)
smallest rout tool	<ul style="list-style-type: none"> • $\geq 1.60\text{mm}$ $\leq 1.50\text{mm}$ and $\geq 1.10\text{mm}$ $\leq 1.00\text{mm}$ and $\geq 0.50\text{mm}$ 	<ul style="list-style-type: none"> • $\geq 1.60\text{mm}$ $\leq 1.50\text{mm}$ and $\geq 1.10\text{mm}$ $\leq 1.00\text{mm}$ and $\geq 0.50\text{mm}$ 	<ul style="list-style-type: none"> • $\geq 1.60\text{mm}$ $\leq 1.50\text{mm}$ and $\geq 1.10\text{mm}$ $\leq 1.00\text{mm}$ and $\geq 0.50\text{mm}$ 	<ul style="list-style-type: none"> • $\geq 1.60\text{mm}$ $\leq 1.50\text{mm}$ and $\geq 1.10\text{mm}$ $\leq 1.00\text{mm}$ and $\geq 0.50\text{mm}$ 	<ul style="list-style-type: none"> • $\geq 1.60\text{mm}$ $\leq 1.50\text{mm}$ and $\geq 1.10\text{mm}$ $\leq 1.00\text{mm}$ and $\geq 0.50\text{mm}$ 	<ul style="list-style-type: none"> • $\geq 1.60\text{mm}$ $\leq 1.50\text{mm}$ and $\geq 1.10\text{mm}$ $\leq 1.00\text{mm}$ and $\geq 0.50\text{mm}$
laser drills (Micro-Via)	no	no	optional	optional	no	no
blind via	no	optional	no	no	no	no
chamfer	no	optional (20° and 45°)	optional (20° and 45°)	optional (20° and 45°)	no	no
edge plating	no	optional	optional	optional	no	no
surface finish	<ul style="list-style-type: none"> • ENIG • HAL leadfree • chem. Tin (Sn) 	<ul style="list-style-type: none"> • ENIG • HAL leadfree • chem. Tin (Sn) 	<ul style="list-style-type: none"> • ENIG • chem. Tin (Sn) 	<ul style="list-style-type: none"> • ENIG • chem. Tin (Sn) 	<ul style="list-style-type: none"> • ENIG • chem. Tin (Sn) 	<ul style="list-style-type: none"> • ENIG • chem. Tin (Sn)
hard gold with plating ties	no	optional	optional	optional	no	no
solder resist	green	green	green	green	green	green
Fully coated silkscreen*	no	white, yellow, red, blue, black	white, yellow, red, blue, black	white, yellow, red, blue, black	no	no
<i>*alternative to colored solder resist</i>						
Partial silkscreen (legend printing)	white	white, yellow, red, blue, black	white, yellow, red, blue, black	white, yellow, red, blue, black	no	no
Plugged Via	no	optional	optional	optional	no	no
E-Test	optional	optional	optional	optional	no	no
UL marking	optional	optional	optional	optional	no	no
additional documentation	CoC, optional	CoC, optional	CoC, optional	CoC, optional	CoC, optional	CoC, optional

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	Flex-rigid 1F-1Ri	Flex-rigid 1F-3Ri	Flex-rigid 1F-5Ri	Flex with stiffener 1F-Ri	Flex with stiffener 2F-Ri
min. PCB / panel size	30mm x 15mm (only as a panel)	30mm x 15mm (only as a panel)	30mm x 15mm (only as a panel)	30mm x 15mm (only as a panel)	30mm x 15mm (only as a panel)
max. PCB / panel size	426mm x 271mm (only as a panel)	426mm x 271mm (only as a panel)	426mm x 271mm (only as a panel)	426mm x 271mm	426mm x 271mm
material type	TG 150	TG 150	TG 150	Polyimid (glueless)	Polyimid (glueless)
number of layers	2 layer	4 layer	6 layer	1 layer	2 layer
thickness	• 1.00mm • 1.55mm	• 1.00mm • 1.55mm	• 1.00mm • 1.55mm	Stiffener 0.30mm total	Stiffener 0.30mm total
structures outside / inside	• ≥ 150µm • ≥ 125µm • ≥ 100µm (not conform to IPC)	• ≥ 150µm • ≥ 125µm • ≥ 100µm (not conform to IPC)	• ≥ 150µm • ≥ 125µm • ≥ 100µm (not conform to IPC)	• ≥ 150µm • ≥ 125µm • ≥ 100µm (not conform to IPC)	• ≥ 150µm • ≥ 125µm • ≥ 100µm (not conform to IPC)
copper outside / inside	• 35µm	• outside: 35µm • inside: 18µm	• outside: 35µm • inside: 18µm	• 18µm • 35µm	• 18µm (keine galv. Metallisierung) • 35µm
finished hole diameter	• ≥ 0.25mm (Pad ≥ 0.60mm) • ≥ 0.10mm (Pad ≥ 0.45mm)	• ≥ 0.25mm (Pad ≥ 0.60mm) • ≥ 0.10mm (Pad ≥ 0.45mm)	• ≥ 0.25mm (Pad ≥ 0.60mm) • ≥ 0.10mm (Pad ≥ 0.45mm)	• ≥ 0.25mm (Pad ≥ 0.60mm) • ≥ 0.10mm (Pad ≥ 0.45mm)	• ≥ 0.25mm (Pad ≥ 0.60mm) • ≥ 0.10mm (Pad ≥ 0.45mm)
smallest rout tool	• ≥ 1.60mm ≤ 1.50mm and ≥ 1.10mm ≤ 1.00mm and ≥ 0.50mm	• ≥ 1.60mm ≤ 1.50mm and ≥ 1.10mm ≤ 1.00mm and ≥ 0.50mm	• ≥ 1.60mm ≤ 1.50mm and ≥ 1.10mm ≤ 1.00mm and ≥ 0.50mm	• ≥ 1.60mm ≤ 1.50mm and ≥ 1.10mm ≤ 1.00mm and ≥ 0.50mm	• ≥ 1.60mm ≤ 1.50mm and ≥ 1.10mm ≤ 1.00mm and ≥ 0.50mm
laser drills (Micro-Via)	no	no	no	no	no
blind via	no	no	no	no	no
chamfer	no	no	no	no	no
edge plating	no	no	no	no	no
surface finish	• ENIG • chem. Tin (Sn)	• ENIG • chem. Tin (Sn)	• ENIG • chem. Tin (Sn)	• ENIG • chem. Tin (Sn)	• ENIG • chem. Tin (Sn)
hard gold with plating ties	no	no	no	no	no
solder resist	green	green	green	green	green
Fully coated silkscreen*	no	no	no	no	no
<i>*alternative to colored solder resist</i>					
Partial silkscreen (legend printing)	white, yellow, red, blue, black	white, yellow, red, blue, black	white, yellow, red, blue, black	no	no
Plugged Via	no	no	no	no	no
E-Test	preset	preset	preset	optional	optional
UL marking	optional	optional	optional	no	no
additional documentation	CoC, optional	CoC, optional	CoC, optional	CoC, optional	CoC, optional