

Properties	OSP <sup>1</sup>	HAL <sup>2</sup>	Immersion Ni/Au <sup>3</sup>	Immersion Ag	Immersion Sn	Immersion Ni/Pd/Au <sup>4</sup>	Thick gold
<b>Production</b>							
Process Effort	low	medium	medium	medium	medium	medium	high
Planarity	yes	no	yes	yes	yes	yes	yes
Thickness indication	0,2µm	3-25µm	Ni 3-5µm Au 0,05µm	Ag 0,125 - 0,65µm	1µm	Ni 3-5µm Pd 0,2-0,5µm Au 0,05µm	Au 0,7-0,9µm
<b>Application</b>							<b>Connector</b>
Rigid	yes	yes	yes	yes	yes	yes	yes
Flex	yes	yes	restricted <sup>5</sup>	yes	yes	restricted <sup>5</sup>	restricted <sup>5</sup>
Flex-rigid	not preferred	yes	yes	yes	yes	yes	yes
Wire Bonding	no	no	yes	no	no	yes	yes
Press fit	yes	yes	restricted <sup>6</sup>	yes	yes	restricted <sup>6</sup>	restricted <sup>6</sup>
Fine pitch	yes	not preferred	yes	yes	yes	yes	yes
HDI - BGA	yes	not preferred	yes	yes	yes	yes	yes
Multiple Solderability	restricted	yes	yes	yes	yes	yes	yes
Cost	low	low	moderate	low	low	high	high
Shelf life <sup>7</sup>	3 months	12 months	12 months	6 months	6 months	12 months	12 months
Refresh surface	yes	yes	no	no	yes	no	no
Handling assembly				Gloves preferred	Gloves preferred		

<sup>1</sup>OSP Organic Surface Protection (ENTEK)

<sup>2</sup>HAL Hot Air Levelling, Pb Free (Optional non Pb Free HAL), not preferred for fine pitch due to thickness variation

<sup>3</sup>Immersion Nickel Gold, ENIG

<sup>4</sup>Immersion Nickel Palladium Gold, (ENEPIG)

<sup>5</sup>Stiffener to be used to avoid excessive stress on the surface finish due to bending

<sup>6</sup>Only in combination with suitable connector, check connector documentation

<sup>7</sup>Storage under the following conditions assumed: Original sealed packaging; Temperature 20-24°C, Relative Humidity 30-40%

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