

Layers of innovation. One solution at a time.

Tapes, liquid adhesives, and conductive adhesives from 3M help address multiple design challenges across a range of smartphone design applications. Explore 3M bonding solutions and EMI management solutions for enclosures, displays, FPCs, camera lenses and more.

- **Cover glass bonding** requires both high adhesion and shock absorbing capabilities to help prevent accidental glass damage. Bonding solutions from 3M offer **secure bonding for edge-to-edge displays** with minimal bonding areas.
- **Back covers** are tasked with both showcasing crucial design elements and protecting internal components. We offer a range of **high-strength tapes** addressing different design obstacles – from impact, water, or chemical resistance to reworkability and curved surface designs.
- **Ultra-thin display panel bonding tapes** from 3M can help **navigate foldable and curved devices** and offer excellent levels of anti-lifting, oxidation resistance, conformability, and cleanliness.
- **FPC bonding tapes** from 3M hold firm while tackling a variety of different design challenges such as adhering to curved surfaces, hard-to-bond surfaces like polyimide and resisting heat where it is needed most.
- Tapes and liquid adhesives from 3M are ready to **help protect intricate camera components** from the effects of daily use such as drops and spills.
- Conductive adhesives from 3M deliver a broad spectrum of performance – from **EMI shielding in the bond line gap for faraday cage designs** and high frequency RF noise attenuation to providing low **contact resistance** and electrical **conductivity for grounding designs**. With a range of conductive tapes, work with 3M to help find an ideal solution to help reduce EMI when there is contact between commonly used metals such as stainless steel or aluminum.

Smartphone Applications

No.	Application Idea	No.	Application Idea	No.	Application Idea
1	Display shielding	8	Antenna Bonding	15	Camera bonding (lens)
2	Display EMI absorption	9	PCB shielding	16	Foam lamination (not shown)
3	Display module bonding	10	Camera shielding	17	Mesh bonding (not shown)
4	Cover display bonding	11	Back cover bonding	18	Silicone bonding (not shown)
5	Battery bonding	12	Component grounding	19	Packaging (not shown)
6	FPC bonding	13	Logo bonding		
7	FPC grounding	14	Camera bonding (deco)		



	Number	Application	Use ideas	Featured Product Number	Product Type	Color	Thickness (µm)	Features
Smartphone	1	Display shielding	Display FPC shielding	1050TC	Single Sided Copper Foil Tape	Copper	15/18/20/25	<ul style="list-style-type: none"> • XYZ-conductivity • Conformable, quick bonding • Copper foil backing
				1020BC	Single Sided Conductive Black Foil Tape	Black	10/20/25	<ul style="list-style-type: none"> • XYZ-conductivity • Conformable, quick bonding • Black copper foil backing
	2	Display EMI absorption	Display FPC/ back side EMI absorption	EM25TP	Absorber	Black	25/35/50/150/200/250	<ul style="list-style-type: none"> • Targeted permeability for < 5-10MHz FFDM performance • Excellent absorbing performance from 100MHz to 4 GHz • Black PET top film layer and PSA are optional
	3	Display module bonding	Glass fiber reinforced plastic to metal bonding	74xxxNH	Adhesive Transfer Tape	Clear	25/75/110/200	<ul style="list-style-type: none"> • Low modulus at RT & lower temperature • High temperature and humidity resistance • Good liner release properties for convertibility
				UCT-xx	Double Coated PET Tape	Clear	10/20/30/50	<ul style="list-style-type: none"> • Ultra clear • High initial adhesion • Produced in a clean room, easily converted
	4	Cover display bonding	Ink-coated glass to metal, glass fiber reinforced plastic to metal, metal to metal	VHB™ 5981	Acrylic Foam PET Tape	Black	200/250/300/350/400	<ul style="list-style-type: none"> • Good reworkability • Impact resistance and conformability • Easily converted"
				VHB™ 590x	Acrylic Foam Tape	Black	150/200/250/300/350	<ul style="list-style-type: none"> • High bonding strength and durability • Conformable • Seal against water ingress
				VHB™ 864xx*	Acrylic Foam Tape	Black	150/200/250/300	<ul style="list-style-type: none"> • High bonding strength • Impact resistance • Conformable
			Cpper film to PBT or anodized aluminum	94130HD*	PE Foam Tape	Black	300	<ul style="list-style-type: none"> • Good rework performance by heat • Impact resistance • High push out force and anti-lifting • Good compression and sealing

*Sample available globally, however sales is limited to Asia

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	Number	Application	Use ideas	Featured Product Number	Product Type	Color	Thickness (µm)	Features
Smartphone	5	Battery bonding	Plastic film to metal alloy	552xxP/BP	Double Coated PET Tape	Clear, Black	50/75/100/120	<ul style="list-style-type: none"> • High initial adhesion • Good shear holding power • Easily converted
				9628B, 9629B	Double Coated PET Tape	Black	50, 100	<ul style="list-style-type: none"> • Excellent adhesion to difficult to bond surfaces • Easily converted
				VHB™ 864xx*	Acrylic Foam Tape	Black	150/200/250/300	<ul style="list-style-type: none"> • High bonding strength • Impact resistance • Conformable
				950xx	Adhesive Transfer Tape	Black	50/100	<ul style="list-style-type: none"> • Impact resistance and damping • High bonding strength • Conformable, removable
	6	FPC bonding	FPC to plastic	9471LE, 9472LE	Adhesive Transfer Tape	Clear	58, 132	<ul style="list-style-type: none"> • Bonding to low surface energy substrates • Anti-lifting • Resistance to chemicals, moisture and humidity
				GTM7xxP/BP	Double Coated PET Tape	Clear, Black	50/80/100/150/200/250	<ul style="list-style-type: none"> • Bonding to low surface energy substrates • High peel strength • Anti-repulsion, easily converted
				9077	Double Coated Tissue Tape	Clear	50	<ul style="list-style-type: none"> • 260°C short-term heat resistance • Releasable after lead-free solder reflow • High adhesion and holding power
	7	FPC grounding	FPC to back cover/metal part grounding	9701	Double Sided Non-woven Conductive Tape	Grey	50/100	<ul style="list-style-type: none"> • XYZ-conductivity • Good electrical contact to small area • Nickel/copper-coated conductive non-woven fabric carrier
				9711S	Double Sided Conductive Fabric Tape	Grey	30/50/80/100/120/130/150/170/200/210/220/250/300	<ul style="list-style-type: none"> • XYZ-conductivity • Excellent conformability, quick bonding • Nickel/copper-coated conductive fabric and conductive PSA
	8	Antenna Bonding	Antenna FPC to metal	81504	Adhesive Transfer Tape	Clear	38	<ul style="list-style-type: none"> • Low and stable dielectric constant • High adhesion • High temperature and humidity resistant
				467MP, 468MP	Adhesive Transfer Tape	Clear	60, 130	<ul style="list-style-type: none"> • Up to 204°C short-term heat resistance • Solvent resistance • High shear strength
				9471LE, 9472LE	Adhesive Transfer Tape	Clear	58, 132	<ul style="list-style-type: none"> • Bonding to low surface energy substrates • Anti-lifting • Resistance to chemicals, moisture and humidity

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	Number	Application	Use ideas	Featured Product Number	Product Type	Color	Thickness (µm)	Features
Smartphone	9	PCB shielding	Shielding can lid replacement	3304BC-S	Single Sided Conductive Black Foil Tape	Black	45	<ul style="list-style-type: none"> • XYZ-conductivity, conformable • Excellent EMI/ESD and electrical performance over time • Scratch resistant black copper foil carrier
	10	Camera shielding	Camera PCB/FPC shielding	1050TC	Single Sided Copper Foil Tape	Copper	15/18/20/25	<ul style="list-style-type: none"> • XYZ-conductivity • Conformable, quick bonding • Copper foil backing
				3304BC-S	Single Sided Conductive Black Foil Tape	Black	45	<ul style="list-style-type: none"> • XYZ-conductivity, conformable • Excellent EMI/ESD and electrical performance over time • Scratch resistant black copper foil carrier"
	11	Back cover bonding	Ink-coated glass to metal or glass fiber reinforced plastic to metal	VHB™ 590x	Acrylic Foam Tape	Black	150/200/250/300/350	<ul style="list-style-type: none"> • High bonding strength and durability • Conformable • Seal against water ingress
				5126*	PE Foam Tape	Black	250/300/350	<ul style="list-style-type: none"> • Waterproofing • Anti-lifting • High push out force and impact resistance
				VHB™ 864xx*	Acrylic Foam Tape	Black	150/200/250/300	<ul style="list-style-type: none"> • High bonding strength • Impact resistance • Conformable
	12	Component grounding	Component grounding to metal frame	9711S	Double Sided Conductive Fabric Tape	Grey	30/50/80/100/120/130/170/200/210/220/250/300	<ul style="list-style-type: none"> • XYZ-conductivity • Excellent conformability, quick bonding • Nickel/copper-coated conductive fabric and conductive PSA
	13	Logo bonding	Ink-coated metal to metal	961xxCR	Adhesive Transfer Tape	Clear	25/50	<ul style="list-style-type: none"> • Chemical resistance • Produced in a clean room
				VHB™ 590x	Acrylic Foam Tape	Black	150/200/250/300/350	<ul style="list-style-type: none"> • High bonding strength and durability • Conformable • Seal against water ingress
	14	Camera bonding (decoration)	Ink-coated plastic (or glass) to plastic (or metal) bracket bonding	950xx	Adhesive Transfer Tape	Black	50/100	<ul style="list-style-type: none"> • Impact resistance and damping • High bonding strength • Conformable, removable
				9471LE, 9472LE	Adhesive Transfer Tape	Clear	58, 132	<ul style="list-style-type: none"> • Bonding to low surface energy substrates • Anti-lifting • Resistance to chemicals, moisture and humidity
				467MP, 468MP	Adhesive Transfer Tape	Clear	60, 130	<ul style="list-style-type: none"> • Up to 204°C short-term heat resistance • Solvent resistance • High shear strength

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	Number	Application	Use ideas	Featured Product Number	Product Type	Color	Thickness (µm)	Features
Smartphone	15	Camera bonding (lens)	Ink-coated glass to metal bracket bonding	VHB™ 4914	Acrylic Foam Tape	White	150/200/250	<ul style="list-style-type: none"> • Waterproofing • High bonding strength and long-term durability
			Ink-coated glass to plastic	950xx	Adhesive Transfer Tape	Black	50/100	<ul style="list-style-type: none"> • Impact resistance and damping • High bonding strength • Conformable, removable
				VHB™ 5980*	Acrylic Foam Tape	Black	150/200/250/300	<ul style="list-style-type: none"> • Drop shock and impact resistance • Conformable • Seal against water and moisture
	16	Foam lamination	PE foam (or PET film) to plastic	552xxP/BP	Double Coated PET Tape	Clear, Black	50/75/100/120	<ul style="list-style-type: none"> • High initial adhesion • Good shear holding power • Easily converted
				GTM7xxP/BP	Double Coated PET Tape	Clear, Black	50/80/100/150/200/250	<ul style="list-style-type: none"> • Bonding to low surface energy substrates • High peel strength • Anti-repulsion, easily converted
				UCT-xx	Double Coated PET Tape	Clear	10/20/30/50	<ul style="list-style-type: none"> • Ultra clear • High initial adhesion • Produced in a clean room, easily converted
				9471LE, 9472LE	Adhesive Transfer Tape	Clear	58, 132	<ul style="list-style-type: none"> • Bonding to low surface energy substrates • Anti-lifting • Resistance to chemicals, moisture and humidity
	17	Mesh bonding	Mesh to plastic or PU foam	9628B, 9629B	Double Coated PET Tape	Black	50, 100	<ul style="list-style-type: none"> • Excellent adhesion to difficult to bond surfaces • Easily converted
	18	Silicone bonding	Silicone part to plastic	9119	Double Coated PET Tape	Clear	50/100/140	<ul style="list-style-type: none"> • Bonding to silicone substrates • Good shear holding power • Easily converted
				9731	Double Coated PET Tape	Clear	50/100/140	<ul style="list-style-type: none"> • Bonding to silicone substrates • High temperature and chemical resistance
	19	Packaging	Paper bonding	9448A, 9080A	Double Coated Tissue Tape	White, Clear	150	<ul style="list-style-type: none"> • High initial adhesion • Up to 150°C short-term heat resistance • Easily converted
				SP7202	1K Screen Printable Adhesive	Clear	-	<ul style="list-style-type: none"> • Screen printable, high shear strength • UV curable in seconds • Solvent free (100% solids)

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