

DRV8805PWPR

Quality, reliability & packaging data download

Status: ACTIVE

Report date: 08/25/2025



Assembly site: TI TAIWAN A/T

RoHS	Yes
REACH	Yes
Device marking	DRV8805
Lead finish/Ball material	NiPdAu
MSL rating/Peak reflow	Level-3-260C-168 HR
Rating	Catalog

Material content

Homogeneous Material Level Component Level							
Component	Substance	CAS Number	Amount (mg)	Percentage %	ppm	Percentage %	ppm
Bond Wire							
Copper and Its Alloys	Copper	7440-50-8	0.260195	99.999616	999996	0.275394	2754
Precious Metals	Silver	7440-22-4	0.000001	0.000384	4	0.000001	0
Sub-total	—	—	0.260196	100	1000000	0.275395	2754
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	0.952884	85.000000	850000	1.008546	10085
Thermoplastics	Epoxy	85954-11-6	0.168156	15.000000	150000	0.177979	1780
Sub-total	—	—	1.121040	100	1000000	1.186524	11865
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	53.662967	97.584999	975850	56.797630	567976
Copper and Its Alloys	Iron	7439-89-6	1.264793	2.300000	23000	1.338674	13387
Copper and Its Alloys	Phosphorus	7723-14-0	0.008249	0.015001	150	0.008731	87
Zinc and Its Alloys	Zinc	7440-66-6	0.054991	0.100000	1000	0.058203	582
Sub-total	—	—	54.991000	100	1000000	58.203238	582032
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	0.639302	95.120071	951201	0.676646	6766
Precious Metals	Gold	7440-57-5	0.005242	0.779943	7799	0.005548	55
Precious Metals	Palladium	7440-05-3	0.027556	4.099985	41000	0.029166	292
Sub-total	—	—	0.672100	100	1000000	0.711360	7114
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	29.06388	87.999998	880000	30.761614	307616
Other Organic Materials	Carbon Black	1333-86-4	0.132109	0.400001	4000	0.139826	1398
Thermoplastics	Epoxy	85954-11-6	3.831148	11.600000	116000	4.054940	40549
Sub-total	—	—	33.027137	100	1000000	34.956381	349564
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	4.409524	100.000000	1000000	4.667101	46671
Sub-total	—	—	4.409524	100	1000000	4.667101	46671
Total	—	—	94.480997	—	—	100	1000000

MTBF/FIT estimates

MTBF / FIT			MTBF / FIT supporting data						
MTBF	FIT	Usage temp (°C)	Conf level (%)	Activation energy (eV)	Test temp (°C)	Test duration (hours)	Sample size	Fails	Additional comments
2.02×10 ⁹	0.5	55	60	0.7	125	1000	51994	1	—

Qualification summary

Stress	Reference	Min lot qty	SS / lot	Condition	Duration	Result	Notes
HTOL	JESD22-A108	3	77	Life test, 125C	1000 hours	Pass	Or equivalent JEDEC condition
HTSL	JESD22-A103	3	25	High temp storage bake, 150C	1000 hours	Pass	Or equivalent JEDEC condition
AC/UHAST	JESD22-A102/JESD22-A118	3	25	Unbiased HAST 130C / 85% RH	96 hours	Pass	Or equivalent JEDEC condition
THB/HAST	JESD22-A101/JESD22-A110	3	25	HAST 130C/85%RH	96 hours	Pass	Or equivalent JEDEC condition
TC	JESD22-A104	3	25	Temperature cycle -65/150C	500 cycles	Pass	Or equivalent JEDEC condition
SD	J-STD-002	3	22	Per specification	>95% lead coverage	Pass	—
HBM	JS-001	1	3	ESD - HBM	Classification	See data sheet	—
CDM	JS-002	1	3	ESD - CDM	Classification	See data sheet	—
LU	JESD78	1	3	Latch-up	Per JESD78	Pass	As applicable per JESD78
MSL	J-STD-020	—	—	Per J-STD-020	Classification	See data sheet	—

Ongoing reliability monitoring

FAB process reliability data

Fab Process	Reliability Test	Rolling Year (3Q2024 - 2Q2025) Sample Size	Cumulative Sample Size	Disposition
Power BICMOS	Life test 125C, 1000 Hours or Equivalent JEDEC Condition	25457	425749	Pass

Assembly process reliability data

Package Family	Reliability Test	Rolling Year (3Q2024 - 2Q2025) Sample Size	Cumulative Sample Size	Disposition
HTSSOP	Biased HAST 130C/85%RH, 96 Hours or Equivalent JEDEC Condition	5287	47214	Pass
HTSSOP	High temp storage bake 150C, 1000 Hours or Equivalent JEDEC Condition	4297	35006	Pass
HTSSOP	Temperature cycle -65/150C, 500 Hours or Equivalent JEDEC Condition	9203	101018	Pass
HTSSOP	Unbiased HAST 130C/85% RH, 96 Hours or Equivalent JEDEC Condition	5306	72601	Pass

Additional resources

[General quality guidelines](#)

[Certifications](#)

[Conflict minerals specialized disclosure report](#)

[Restricted chemical test report](#)

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