

TPS259841RZJR

## Quality, reliability & packaging data download

Status: ACTIVE

Report date: 10/25/2023



Assembly site: **TI PHILIPPINES CLARK A/T**

RoHS	Yes
REACH	Yes
Device marking	TPS, 259841
Lead finish/Ball material	NIPDAU
MSL rating/Peak reflow	Level-2-260C-1 YEAR
Rating	Catalog

## Material content

Component	Substance	CAS Number	Amount (mg)	Homogeneous Material Level		Component Level	
				Percentage %	ppm	Percentage %	ppm
<b>Lead Frame</b>							
Copper and Its Alloys	Copper	7440-50-8	11.990218	55.001000	550010	4.445551	44456
Nickel and Its Alloys	Nickel	7440-02-0	0.195328	0.896000	8960	0.072421	724
Precious Metals	Gold	7440-57-5	0.001308	0.006000	60	0.000485	5
Precious Metals	Palladium	7440-05-3	0.00872	0.040000	400	0.003233	32
Thermoplastics	Epoxy	85954-11-6	9.604426	44.057000	440570	3.560983	35610
Sub-total	—	—	21.800000	100	1000000	8.082673	80827
<b>Lead Frame Plating</b>							
Nickel and Its Alloys	Nickel	7440-02-0	195.235702	95.120000	951200	72.386529	723865
Precious Metals	Gold	7440-57-5	1.600966	0.780000	7800	0.593582	5936
Precious Metals	Palladium	7440-05-3	8.415332	4.100000	41000	3.120109	31201
Sub-total	—	—	205.252000	100	1000000	76.100220	761002
<b>Mold Compound</b>							
Other Inorganic Materials	Fused Silica	60676-86-0	28.160845	88.000001	880000	10.441051	104411
Other Organic Materials	Chlorine	7782-50-5	0.00032	0.001000	10	0.000119	1
Other Plastics and Rubber	Carbon Black	1333-86-4	0.096003	0.300000	3000	0.035595	356
Thermoplastics	Epoxy	85954-11-6	3.743792	11.698999	116990	1.388066	13881
Sub-total	—	—	32.000960	100	1000000	11.864830	118648
<b>Semiconductor Device</b>							
Ceramics / Glass	Doped Silicon	7440-21-3	10.29772	100.000000	1000000	3.818032	38180
Sub-total	—	—	10.29772	100	1000000	3.818032	38180
<b>Solder Bump</b>							
Copper and Its Alloys	Copper	7440-50-8	0.319061	88.120141	881201	0.118297	1183
Other Nonferrous Metals and Alloys	Tin	7440-31-5	0.040842	11.279983	112800	0.015143	151
Precious Metals	Silver	7440-22-4	0.002172	0.599876	5999	0.000805	8
Sub-total	—	—	0.362075	100	1000000	0.134245	1342
Total	—	—	269.712755	—	—	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	
8.71×10 <sup>9</sup>	0.1	55	60	0.7	125	1000	101758	0	—	

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## Qualification summary

No results found

## Ongoing reliability monitoring

No results found

## Additional resources

[General quality guidelines](#)

[Certifications](#)

[Conflict minerals specialized disclosure report](#)

For additional component information, please visit [Material content search](#)

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