

PRODUCT CHANGE NOTICE

1. TITLE IIL AND IIH LIMIT CHANGE ON SMD# 5962-88645, UT1553RTMP		2. DOCUMENT NUMBER SPO-2016-PCN-0001	
		3. DATE (Year, Month, Date) 2016, March, 24	
4. MANUFACTURER NAME AND ADDRESS CAES 4350 CENTENNIAL BOULEVARD COLORADO SPRINGS, COLORADO 80907-3486		5. MANUFACTURER POINT OF CONTACT NAME Tim Meade	
		6. MANUFACTURER POINT OF CONTACT TELEPHONE 719-594-8000	
		7. MANUFACTURER POINT OF CONTACT EMAIL tim.l.meade@cobhamaes.com	
8. CAGE CODE 65342	9. EFFECTIVE DATE March 24, 2016	10. PRODUCT IDENTIFICATION CODE JP01A	11. BASE PART UT1553RTMP
12. BLANK		13. SMD NUMBER 5962-88645	14. DEVICE TYPE DESIGNATOR 01
		15. RHA LEVELS None	16. QML LEVEL Non-JAN Class B
		17. NON QML LEVEL Proto & HiRel	18. GIDEP GB4-C-16-0001

CAES IS ISSUING THIS PRODUCT CHANGE NOTICE TO ANNOUNCE A CHANGE TO IIL AND IIH LIMITS ON THE UT1553RTMP (SMD#5962-88645)

THE UT1553RTMP (SMD# 5962-88645) HAS REACHED END OF LIFE (REFERENCE GIDEP GB4-D-16-0001 / ADEPT SPO-2016-D-0001). THE FINAL DIE INVENTORY WAS FABRICATED WITH ELEVATED SILICON RESISTANCE, WHICH DIRECTLY AFFECTS THE PULL-UP AND PULL-DOWN RESISTORS ON THE INPUTS LISTED BELOW. THE RESISTANCES ARE HIGHEST AT MAXIMUM TEMPERATURE. TO MAXIMIZE REMAINING PRODUCTION LIFE, CAES IS RELAXING THE SMD SPECIFICATION FOR IIH AND IIL ON INPUTS WITH PULL-UPS AND PULL-DOWNS. THE AFFECTED PINS ARE:

INPUTS WITH PULL-UPS			INPUTS WITH PULL-DOWNS		
SIGNAL:	CASE X:	CASE Y & Z:	SIGNAL:	CASE X:	CASE Y & Z:
DMAEN	D10	49	TAPEN	A2	72
DMAG#	D11	48	SME	G11	41
CS#	E9	44	ILLCOM	J6	22
SVC#	G10	40	ENBC	K3	13
			TEST	L2	14

BEGINNING WITH LOT DATE CODE 1601, ALL UT1553RTMP PRODUCT SHIPPED WILL BE COMPLIANT TO THE FOLLOWING IIH AND IIL SPECIFICATION LIMITS:

ORIGINAL IIL & IIH LIMITS							NEW IIL & IIH LIMITS																																																																																										
<p>TABLE I. Electrical performance characteristics.</p> <table border="1"> <thead> <tr> <th rowspan="2">Test</th> <th rowspan="2">Symbol</th> <th rowspan="2">Test conditions 4.5 V ≤ V_{DD} ≤ 5.5 V -55°C ≤ T_C ≤ +125°C unless otherwise specified</th> <th rowspan="2">Group A subgroup</th> <th rowspan="2">Device type</th> <th colspan="2">Limits</th> <th rowspan="2">Unit</th> </tr> <tr> <th>Min</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>Input leakage current, TTL inputs</td> <td>I_{IN}</td> <td>V_{IN} = V_{DD} or V_{SS}</td> <td>1, 2, 3</td> <td>All</td> <td>-1</td> <td>+1</td> <td>μA</td> </tr> <tr> <td>Inputs with pull-down resistors</td> <td></td> <td>V_{IN} = V_{DD}</td> <td></td> <td></td> <td>100</td> <td>1000</td> <td></td> </tr> <tr> <td>Inputs with pull-down resistors</td> <td></td> <td>V_{IN} = 2.4 V 1/</td> <td></td> <td></td> <td></td> <td>400</td> <td></td> </tr> <tr> <td>Inputs with pull-up resistors</td> <td></td> <td>V_{IN} = V_{SS}</td> <td></td> <td></td> <td>-1000</td> <td>-100</td> <td></td> </tr> </tbody> </table>							Test	Symbol	Test conditions 4.5 V ≤ V _{DD} ≤ 5.5 V -55°C ≤ T _C ≤ +125°C unless otherwise specified	Group A subgroup	Device type	Limits		Unit	Min	Max	Input leakage current, TTL inputs	I _{IN}	V _{IN} = V _{DD} or V _{SS}	1, 2, 3	All	-1	+1	μA	Inputs with pull-down resistors		V _{IN} = V _{DD}			100	1000		Inputs with pull-down resistors		V _{IN} = 2.4 V 1/				400		Inputs with pull-up resistors		V _{IN} = V _{SS}			-1000	-100		<p>TABLE I. Electrical performance characteristics.</p> <table border="1"> <thead> <tr> <th rowspan="2">Test</th> <th rowspan="2">Symbol</th> <th rowspan="2">Test conditions 4.5 V ≤ V_{DD} ≤ 5.5 V -55°C ≤ T_C ≤ +125°C unless otherwise specified</th> <th rowspan="2">Group A subgroup</th> <th rowspan="2">Device type</th> <th colspan="2">Limits</th> <th rowspan="2">Unit</th> </tr> <tr> <th>Min</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>Input leakage current, TTL inputs</td> <td>I_{IN}</td> <td>V_{IN} = V_{DD} or V_{SS}</td> <td>1, 2, 3</td> <td>All</td> <td>-1</td> <td>+1</td> <td>μA</td> </tr> <tr> <td>Inputs with pull-down resistors</td> <td></td> <td>V_{IN} = V_{DD}</td> <td></td> <td></td> <td>80</td> <td>1000</td> <td></td> </tr> <tr> <td>Inputs with pull-down resistors</td> <td></td> <td>V_{IN} = 2.4 V 1/</td> <td></td> <td></td> <td></td> <td>400</td> <td></td> </tr> <tr> <td>Inputs with pull-up resistors</td> <td></td> <td>V_{IN} = V_{SS}</td> <td></td> <td></td> <td>-1000</td> <td>-80</td> <td></td> </tr> </tbody> </table>							Test	Symbol	Test conditions 4.5 V ≤ V _{DD} ≤ 5.5 V -55°C ≤ T _C ≤ +125°C unless otherwise specified	Group A subgroup	Device type	Limits		Unit	Min	Max	Input leakage current, TTL inputs	I _{IN}	V _{IN} = V _{DD} or V _{SS}	1, 2, 3	All	-1	+1	μA	Inputs with pull-down resistors		V _{IN} = V _{DD}			80	1000		Inputs with pull-down resistors		V _{IN} = 2.4 V 1/				400		Inputs with pull-up resistors		V _{IN} = V _{SS}			-1000	-80	
Test	Symbol	Test conditions 4.5 V ≤ V _{DD} ≤ 5.5 V -55°C ≤ T _C ≤ +125°C unless otherwise specified	Group A subgroup	Device type	Limits							Unit																																																																																					
					Min	Max																																																																																											
Input leakage current, TTL inputs	I _{IN}	V _{IN} = V _{DD} or V _{SS}	1, 2, 3	All	-1	+1	μA																																																																																										
Inputs with pull-down resistors		V _{IN} = V _{DD}			100	1000																																																																																											
Inputs with pull-down resistors		V _{IN} = 2.4 V 1/				400																																																																																											
Inputs with pull-up resistors		V _{IN} = V _{SS}			-1000	-100																																																																																											
Test	Symbol	Test conditions 4.5 V ≤ V _{DD} ≤ 5.5 V -55°C ≤ T _C ≤ +125°C unless otherwise specified	Group A subgroup	Device type	Limits		Unit																																																																																										
					Min	Max																																																																																											
Input leakage current, TTL inputs	I _{IN}	V _{IN} = V _{DD} or V _{SS}	1, 2, 3	All	-1	+1	μA																																																																																										
Inputs with pull-down resistors		V _{IN} = V _{DD}			80	1000																																																																																											
Inputs with pull-down resistors		V _{IN} = 2.4 V 1/				400																																																																																											
Inputs with pull-up resistors		V _{IN} = V _{SS}			-1000	-80																																																																																											

19. DISPOSITIONARY RECOMMENDATION:	CHECK & USE AS IS <input type="checkbox"/>	CONTACT MANUFACTURER <input type="checkbox"/>	REMOVE & REPLACE <input type="checkbox"/>	CORRECT & USE AS SPECIFIED <input type="checkbox"/>
20. ADEPT REPRESENTATIVE Lin-Chi Huang	21. SIGNATURE 			22. DATE 2016, Macch 24

TABLE I

AFFECTED DEVICES

MANUFACTURER PART NUMBER	GOVERNMENT PART NUMBER
UT1553/RTMP-APA	
UT1553/RTMP-GPC	
UT1553/RTMP-WPC	
UT1553/RTMP-ACA	
UT1553/RTMP-GCC	
UT1553/RTMP-GCA	
UT1553 RTMP WCC	5962-8864501YC
UT1553 RTMP WCA	5962-8864501YA
UT1553 RTMP ACC	5962-8864501ZC
UT1553 RTMP ACA	5962-8864501ZA
UT1553 RTMP GCC	5962-8864501XC
UT1553 RTMP GCA	5962-8864501XA