

Release Date: 2021-09-01

TITLE: Product/Process Change Notice - Additional Assembly & Test Facility For DFN5x6 Clip Package (Phase III)			
RELEASE DATE: 2021-09-01 OWNER DEPARTMENT: Product & Test			
REVISION HISTORY			
			(The original approval sheet is kept in DCC)
REVISION	RELEASE DATE	E AUTHOR DESCRIPTION OF CHANGES	
А	2021-09-01	Yi Liu	original



PROCESS CHANGE NOTIFICATION

Additional Assembly & Test Facility For	PCN #	CN-00454A
DFN5x6 Clip Package (Phase III)	run #	CN-00454A

Dear Valued Customer,

This Product Change Notification (PCN) contains advance information about changes we are planning to make to the products that you have purchased within the last two years.

To increase manufacturing capacity, AOS qualified Carsem Semiconductor (Suzhou) Co., Ltd. as an additional Assembly & Test Facility for DFN5x6 Clip package. Carsem has been AOS assembly and test subcontractor for other DFN/QFN package since 2005. The qualification and manufacturing release of DFN5x6 Clip package in Carsem can be divided into several phases. The involved products of Phase III are listed in the appendix. The form, fit, function, quality and reliability of our products will not be affected in any way with this change.

Please acknowledge receipt of this PCN as well as requests within 30 days by signing in at <u>http://www.aosmd.com/quality/pcn</u> or sending the enclosed Acknowledgement Form to your local AOS Sales Representative.

Lack of acknowledgement of the PCN within 30 days constitutes acceptance of the change.

If you have any questions regarding this change notice, please contact your local AOS Sales Representative. <u>http://www.aosmd.com/contact</u>

Sincerely,

CK OH

Senior Vice President, Quality

Alpha and Omega Semiconductor



Process Change Notification

PRODUCT CATEGORY	PRODUCT(S) AFFECTED
MOSFET	Please refer the affected part list at the end of this PCN. * This PCN extends to all new related products that may be released after this PCN.

TYPE OF CHANGE

Additional Assembly and Test Facility

DESCRIPTION OF CHANGE

To release Carsem Semiconductor (Suzhou) Co., Ltd. as an additional Assembly & Test Facility for products listed in the appendix.

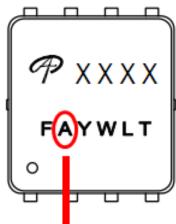
REASON FOR CHANGE

To increase manufacturing capacity.

SAMPLE AVAILIBILITYFIRST SHIP DATESee appendixEstimated to be from Nov. 30th, 2021, or earlier upon customer(To obtain samples or production devices, please
contact your AOS Sales Representative).approval.

METHOD OF IDENTIFICATION

By assembly location code on product marking.



Assembly location code **P** -- Carsem Semiconductor (Suzhou) Co., Ltd.

IMPACT OF CHANGE

Form: None: Fit: None Function: None Reliability: None Environment: None QUALIFICATION / RELIABILITY DATA:

Reliability Qualification for DFN5x6 Clip package:



Reliability test			
Condition	Time Point	Sample Size	Result
T=150°C Vgs=100%Vgsmax	1000 hours	77*3	Pass
T=150°C Vds=80%Vdsmax	1000 hours	77*3	Pass
MSL soak + 3cycle reflow@ 260ºC	-	77*9	Pass
-65(+0/-10)°C to +150(+15/- 0)°C air to air; 30mins/cycle (preferred)	500 cycles	77*3	Pass
130(±2)°C,85(±5)%RH, 33.3psia, Vds=80%Vdsmax before arcing (typically ≤42V)	96hours	77*3	Pass
121(±2)°C, 29.7psia, RH=100%	96hours	77*3	Pass
	ConditionT=150°C Vgs=100%VgsmaxT=150°C Vds=80%VdsmaxT=150°C Vds=80%VdsmaxMSL soak + 3cycle reflow@ $260°C$ -65(+0/-10)°C to +150(+15/- 0)°C air to air; 30mins/cycle (preferred)130(±2)°C,85(±5)%RH, 33.3psia, Vds=80%Vdsmax before arcing (typically ≤42V)121(±2)°C, 29.7psia, RH=100%	ConditionTime PointT=150°C Vgs=100%Vgsmax1000 hoursT=150°C Vds=80%Vdsmax1000 hoursT=150°C Vds=80%Vdsmax1000 hoursMSL soak + 3cycle reflow@ $260°C$ 65(+0/-10)°C to +150(+15/- $0)°C$ air to air; 30mins/cycle (preferred)500 cycles130(±2)°C,85(±5)%RH, 33.3psia, Vds=80%Vdsmax before arcing (typically ≤42V)96hours	Condition Time Point Sample Size T=150°C Vgs=100%Vgsmax 1000 hours 77*3 T=150°C Vds=80%Vdsmax 1000 hours 77*3 T=150°C Vds=80%Vdsmax 1000 hours 77*3 MSL soak + 3cycle reflow@ 260°C - 77*9 -65(+0/-10)°C to +150(+15/- 0)°C air to air; 30mins/cycle (preferred) 500 cycles 77*3 $130(\pm 2)^{\circ}C, 85(\pm 5)$ %RH, 33.3psia, Vds=80%Vdsmax before arcing (typically ≤42V) 96hours 77*3 $121(\pm 2)^{\circ}C, 29.7$ psia, RH=100% 96hours 77*3

PCN RESPONSE:	AOS CONTACTS:
Please acknowledge receipt of this PCN within 30 days	Please contact your local AOS Sales Representative
of delivery	http://www.aosmd.com/contact/
Lack of acknowledgement of the PCN within 30 days	
constitutes acceptance of the change.	

QRU-00022-02(d)



Acknowledgement of Process Change Notification

(Filled by the customer)

(I'flied by the customer)		
Confirming the Receipt of the PCN		
PCN #:		
Receiving date (YY/MM/DD):		
Receiver:		
Department / Title of the receiver:		
Signature / Stamp:		
Customer Request		
Sample request	Quantity:	
Requirement of qualification data:		
Approval of the Change		
Approve	Disapprove	
Reason of disapproval:		
Approver:		
Department / Title of the approver:		
Signature / stamp:		

QRU-00022-02(d)



Appendix: Affected Product List

Part number	Estimated sample available date	Estimated completion date of qualification	Remark
AON6362	Contact Sales for sample schedule	Complete	
AON6362FD	Contact Sales for sample schedule	Complete	
AON6362FH	Contact Sales for sample schedule	Complete	
AON6362P	Contact Sales for sample schedule	Complete	
AON6368	Contact Sales for sample schedule	Complete	
AON6368P	Contact Sales for sample schedule	Complete	
AON6370	Contact Sales for sample schedule	Complete	
AON6370P	Contact Sales for sample schedule	Complete	
AON6370_001	Contact Sales for sample schedule	Complete	
AON6370_002	Contact Sales for sample schedule	Complete	
AON6372	Contact Sales for sample schedule	Complete	
AONS36305	Contact Sales for sample schedule	Complete	
AONS36306	Contact Sales for sample schedule	Complete	
AONS36306D	Contact Sales for sample schedule	Complete	
AONS36306_0C1	Contact Sales for sample schedule	Complete	
AONS36308	Contact Sales for sample schedule	Complete	
AONS36308D	Contact Sales for sample schedule	Complete	
AONS36308FH	Contact Sales for sample schedule	Complete	
AONS36346	Contact Sales for sample schedule	Complete	



AONS36346FD	Contact Sales for sample schedule	Complete
AONS36346FH	Contact Sales for sample schedule	Complete
AONS36346FV	Contact Sales for sample schedule	Complete
AONS36348	Contact Sales for sample schedule	Complete
AONS36348FD	Contact Sales for sample schedule	Complete
AONS36348FH	Contact Sales for sample schedule	Complete
AONS36348FV	Contact Sales for sample schedule	Complete
AONS36352	Contact Sales for sample schedule	Complete
AONS36354	Contact Sales for sample schedule	Complete
AONS36386	Contact Sales for sample schedule	Complete