





|   |   |   |
|---|---|---|
| <b>Title of Change:</b>   | SOIC 14/16 Additional Assembly and Test Site with same die, die attach, wire material and size, mold compound materials, and Test as current Internal site.   |   |
| <b>Proposed First Ship date:</b>  | 19 Jul 2021 or earlier if approved by customer  |   |
| <b>Contact Information:</b>   | Contact your local ON Semiconductor Sales Office or <a href="mailto:logic.fpcn@onsemi.com">logic.fpcn@onsemi.com</a>  |   |
| <b>PCN Samples Contact:</b>   | Contact your local ON Semiconductor Sales Office or < <a href="mailto:PCN.samples@onsemi.com">PCN.samples@onsemi.com</a> >. Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements. |   |
| <b>Additional Reliability Data:</b>   | Contact your local ON Semiconductor Sales Office or <a href="mailto:Chiolo.Basa@onsemi.com">Chiolo.Basa@onsemi.com</a>  |   |
| <b>Type of Notification:</b>  | This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. ON Semiconductor will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a>                         |   |
| <b>Marking of Parts/ Traceability of Change:</b>  | Assembly Code will be different for parts from new site.  |   |
| <b>Change Category:</b>   | Test Change, Assembly Change  |   |
| <b>Change Sub-Category(s):</b>  | Material Change, Manufacturing Site Addition  |   |
| <b>Sites Affected:</b>  |   |   |
| <b>ON Semiconductor Sites</b>   | <b>External Foundry/Subcon Sites</b>  |   |
| ON Semiconductor Carmona, Philippines   | ATEC - Automated Technology, Philippines  |   |
| <b>Description and Purpose:</b>   |   |   |
| <p>Qualify new subcontractor site to increase capacity for SOIC 14/16 leads. After the proposed 1<sup>st</sup> ship date, parts will be supplied from either Philippine site. There are no product material changes as a result of this change.</p> <p>Test is performed on the same tester, test program and handler combination in both facilities.</p> <p>Note the parts in this FPCN are industrial, non-automotive, parts only and are NOT recommended to be used as Automotive application.</p> |   |   |
|   | <b>Before Change</b>  | <b>After Change</b>   |
| Assembly and Test Site  | ON Semiconductor Carmona, Philippines   | ON Semiconductor Carmona, Philippines<br>or<br>ATEC - Automated Technology, Philippines |



|                        | Existing Site  | New Site  |
|------------------------|--|---|
| Product marking change | <p>ASSEMBLY CODE: "P"</p>  | <p>ASSEMBLY CODE: "Y"</p>  <p>No change in marking style. The only difference is the assembly code</p> |

**Reliability Data Summary:**

**QV DEVICE NAME:** MC74HC4051ADR2G

**RMS:** O48177 | O72374

**PACKAGE:** SOIC 16

| Test  | Specification               | Condition                         | Interval | Results |
|-------|-----------------------------|-----------------------------------|----------|---------|
| HTOL  | JESD22-A108                 | Ta= 125°C                         | 1008 hrs | 0/231   |
| HTSL  | JESD22-A103                 | Ta= 150°C                         | 1008 hrs | 0/231   |
| TC    | JESD22-A104                 | Ta= -65°C to + 150°C              | 1000 cyc | 0/231   |
| HAST  | JESD22-A110                 | 130°C, 85% RH, 18.8psig, bias     | 192 hrs  | 0/231   |
| uHAST | JESD22-A118                 | 130°C, 85% RH, 18.8psig, unbiased | 96 hrs   | 0/231   |
| PC    | J-STD-020 JESD-A113         | MSL 1 @ 260°C                     |          | 0/693   |
| SD    | JSTD002                     | Ta = 245C, 10 sec                 |          | 0/ 45   |
| PD    | JESD22-B100 and JESD22-B108 | Per Case Outline                  |          | 0/30    |

**Electrical Characteristics Summary:**

Electrical characteristics available upon request.

**List of Affected Parts:**

*Note: Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the [PCN Customized Portal](#).*

| Part Number      | Qualification Vehicle |
|------------------|-----------------------|
| MC74HC112ADR2G   | MC74HC4051ADR2G       |
| MC74HC138ADR2G   | MC74HC4051ADR2G       |
| MC74HC139ADR2G   | MC74HC4051ADR2G       |
| MC74HC151ADR2G   | MC74HC4051ADR2G       |
| MC74HC153ADR2G   | MC74HC4051ADR2G       |
| MC74HC157ADR2G   | MC74HC4051ADR2G       |
| MC74HC160ADR2G   | MC74HC4051ADR2G       |
| MC74HC161ADR2G   | MC74HC4051ADR2G       |
| MC74HC163ADR2G   | MC74HC4051ADR2G       |
| MC74HC165ADR2G   | MC74HC4051ADR2G       |
| MC74HC174ADR2G   | MC74HC4051ADR2G       |
| MC74HC175ADR2G   | MC74HC4051ADR2G       |
| MC74HC238ADR2G   | MC74HC4051ADR2G       |
| MC74HC251ADR2G   | MC74HC4051ADR2G       |
| MC74HC259ADR2G   | MC74HC4051ADR2G       |
| MC74HC365ADR2G   | MC74HC4051ADR2G       |
| MC74HCT595ADR2G  | MC74HC4051ADR2G       |
| MC74HCT4851ADR2G | MC74HC4051ADR2G       |
| MC74HCT4094ADR2G | MC74HC4051ADR2G       |
| MC74HCT4053ADR2G | MC74HC4051ADR2G       |
| MC74HCT4052ADR2G | MC74HC4051ADR2G       |
| MC74HCT4051ADR2G | MC74HC4051ADR2G       |
| MC74HCT365ADR2G  | MC74HC4051ADR2G       |
| MC74HCT259ADR2G  | MC74HC4051ADR2G       |
| MC74HCT138ADR2G  | MC74HC4051ADR2G       |
| MC74HC597ADR2G   | MC74HC4051ADR2G       |
| MC74HC595ADR2G   | MC74HC4051ADR2G       |
| MC74HC589ADR2G   | MC74HC4051ADR2G       |
| MC74HC4852ADR2G  | MC74HC4051ADR2G       |



|                  |                 |
|------------------|-----------------|
| MC74HC4851ADR2G  | MC74HC4051ADR2G |
| MC74HC4538ADR2G  | MC74HC4051ADR2G |
| MC74HC4316ADR2G  | MC74HC4051ADR2G |
| MC74HC4094ADR2G  | MC74HC4051ADR2G |
| MC74HC4060ADR2G  | MC74HC4051ADR2G |
| MC74HC4053ADR2G  | MC74HC4051ADR2G |
| MC74HC367ADR2G   | MC74HC4051ADR2G |
| MC74HC368ADR2G   | MC74HC4051ADR2G |
| MC74HCT4852ADR2G | MC74HC4051ADR2G |
| MC74HCT366ADR2G  | MC74HC4051ADR2G |
| MC74HC4052ADR2G  | MC74HC4051ADR2G |
| MC74HC4051ADR2G  | MC74HC4051ADR2G |
| MC74HC4040ADR2G  | MC74HC4051ADR2G |
| MC74HC4020ADR2G  | MC74HC4051ADR2G |
| MC74HC390ADR2G   | MC74HC4051ADR2G |

Japanese translation of the notification starts here.  
通知の日本語訳はここから始まります。

*Note: The Japanese version is for reference only. In case of any differences between the English and Japanese version, the English version shall control.*

注：日本語版は参照用です。英語版と日本語版の違いがある場合は、英語版が優先されます。

## 最終製品 / プロセス変更通知

文書番号# : FPCN23653X

発行日: 12 Apr 2021

|            |   |
|------------|---|
| 変更件名:      | 現在の社内拠点と同じダイ、ダイ接着剤、ワイヤ材とサイズ、モールド コンパウンド材を使用して、同じ検査を実施できる SOIC 14/16 組立および検査拠点の追加  |
| 初回出荷予定日:   | 19 Jul 2021 またはお客様からの承認が得られた場合はそれ以前.  |
| 連絡先情報:     | 現地のオン・セミコンダクター営業所または < <a href="mailto:logic.fpcn@onsemi.com">logic.fpcn@onsemi.com</a> > にお問い合わせください。  |
| サンプル:      | 現地のオン・セミコンダクター営業所または < <a href="mailto:PCN.Samples@onsemi.com">PCN.Samples@onsemi.com</a> > にお問い合わせください。<br>サンプルは、この変更の初回通知、初回 PCN の日付から 30 日以内に要求してください。<br>サンプル納入時は、依頼日、数量、特別梱包材/ラベル条件によって異なります。                          |
| 追加の信頼性データ: | 最寄りのオン・セミコンダクター営業所または < <a href="mailto:Chielo.Basa@onsemi.com">Chielo.Basa@onsemi.com</a> > にお問い合わせください  |
| 通知種別:      | これは、お客様宛の最終製品 / プロセス変更通知 (FPCN) です。FPCN は、変更実施の 90 日前に発行されます。<br>オン・セミコンダクターは、この通知の送付から 30 日以内に書面による問い合わせがない限り、この変更が承諾されたものとみなします。お問い合わせは、< <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a> > 宛てにお願いします。 |
| 変更部品の識別:   | 新拠点からの製品の組立コードは異なるものになります。  |
| 変更カテゴリ:    | 検査の変更、組立の変更   |
| 変更サブカテゴリ:  | 材料の変更、製造拠点の追加   |

### 影響を受ける拠点:

#### オン・セミコンダクター拠点:

ON Semiconductor Carmona, Philippines

#### 外部製造工場 / 下請業者拠点:

ATEC - Automated Technology, Philippines

### 説明および目的:

SOIC 14/16 リードの生産能力を增強するために、新しい外注先を認定します。初回出荷予定日以降に、製品はいずれかのフィリピン拠点から供給されます。この変更に伴い製品材料に変更はありません。

どちらの工場でも、同じテスター、検査プログラム、ハンドラーの組み合わせにて検査が実施されます。



この FPCN の製品は、産業用、非車載用の製品のみであり、車載用途としては推奨されていないことに注意してください。

|           | 変更前の表記                                | 変更後の表記  |
|-----------|---------------------------------------|---|
| 組立および検査拠点 | ON Semiconductor Carmona, Philippines | ON Semiconductor Carmona, Philippines<br>or<br>ATEC - Automated Technology, Philippines |

# 最終製品 / プロセス変更通知

文書番号# : FPCN23653X

発行日: 12 Apr 2021

|           | 既存の拠点   | 新拠点  |
|-----------|---|--|
| 製品マーキング変更 | <p>組立コード: 「P」</p>  | <p>組立コード: 「Y」</p>  <p>マーキングスタイルに変更はありません。組立コードが異なるだけです。</p> |

## 信頼性データの要約:

デバイス名: MC74HC4051ADR2G

RMS : O48177 | O72374

パッケージ : SOIC 16

| テスト   | 仕様                          | 条件                                | 間隔       | 結果    |
|-------|-----------------------------|-----------------------------------|----------|-------|
| HTOL  | JESD22-A108                 | Ta= 125°C                         | 1008 hrs | 0/231 |
| HTSL  | JESD22-A103                 | Ta= 150°C                         | 1008 hrs | 0/231 |
| TC    | JESD22-A104                 | Ta= -65°C to + 150°C              | 1000 cyc | 0/231 |
| HAST  | JESD22-A110                 | 130°C, 85% RH, 18.8psig, bias     | 192 hrs  | 0/231 |
| uHAST | JESD22-A118                 | 130°C, 85% RH, 18.8psig, unbiased | 96 hrs   | 0/231 |
| PC    | J-STD-020 JESD-A113         | MSL 1 @ 260°C                     |          | 0/693 |
| SD    | JSTD002                     | Ta = 245C, 10 sec                 |          | 0/ 45 |
| PD    | JESD22-B100 and JESD22-B108 | Per Case Outline                  |          | 0/30  |

## 電気的特性の要約:

電気的特性はご要望に応じてご提出いたします。

## 影響を受ける部品の一覧:

注: 部品一覧には標準部品番号 (既製品) のみが記載されています。本 PCN の影響を受けるカスタム部品番号は、PCN メールで提供される顧客個別の付録、または PCN カスタマイズポータルに記載されています。

| 部品番号           | 認定試験用ピークル       |
|----------------|-----------------|
| MC74HC112ADR2G | MC74HC4051ADR2G |
| MC74HC138ADR2G | MC74HC4051ADR2G |

## 最終製品 / プロセス変更通知

文書番号# : FPCN23653X

発行日 : 12 Apr 2021

|                  |                 |
|------------------|-----------------|
| MC74HC139ADR2G   | MC74HC4051ADR2G |
| MC74HC151ADR2G   | MC74HC4051ADR2G |
| MC74HC153ADR2G   | MC74HC4051ADR2G |
| MC74HC157ADR2G   | MC74HC4051ADR2G |
| MC74HC160ADR2G   | MC74HC4051ADR2G |
| MC74HC161ADR2G   | MC74HC4051ADR2G |
| MC74HC163ADR2G   | MC74HC4051ADR2G |
| MC74HC165ADR2G   | MC74HC4051ADR2G |
| MC74HC174ADR2G   | MC74HC4051ADR2G |
| MC74HC175ADR2G   | MC74HC4051ADR2G |
| MC74HC238ADR2G   | MC74HC4051ADR2G |
| MC74HC251ADR2G   | MC74HC4051ADR2G |
| MC74HC259ADR2G   | MC74HC4051ADR2G |
| MC74HC365ADR2G   | MC74HC4051ADR2G |
| MC74HCT595ADR2G  | MC74HC4051ADR2G |
| MC74HCT4851ADR2G | MC74HC4051ADR2G |
| MC74HCT4094ADR2G | MC74HC4051ADR2G |
| MC74HCT4053ADR2G | MC74HC4051ADR2G |
| MC74HCT4052ADR2G | MC74HC4051ADR2G |
| MC74HCT4051ADR2G | MC74HC4051ADR2G |
| MC74HCT365ADR2G  | MC74HC4051ADR2G |
| MC74HCT259ADR2G  | MC74HC4051ADR2G |
| MC74HCT138ADR2G  | MC74HC4051ADR2G |
| MC74HC597ADR2G   | MC74HC4051ADR2G |
| MC74HC595ADR2G   | MC74HC4051ADR2G |
| MC74HC589ADR2G   | MC74HC4051ADR2G |
| MC74HC4852ADR2G  | MC74HC4051ADR2G |
| MC74HC4851ADR2G  | MC74HC4051ADR2G |
| MC74HC4538ADR2G  | MC74HC4051ADR2G |
| MC74HC4316ADR2G  | MC74HC4051ADR2G |
| MC74HC4094ADR2G  | MC74HC4051ADR2G |
| MC74HC4060ADR2G  | MC74HC4051ADR2G |
| MC74HC4053ADR2G  | MC74HC4051ADR2G |
| MC74HC367ADR2G   | MC74HC4051ADR2G |



## 最終製品 / プロセス変更通知

文書番号# : FPCN23653X

発行日 : 12 Apr 2021

|                  |                 |
|------------------|-----------------|
| MC74HC368ADR2G   | MC74HC4051ADR2G |
| MC74HCT4852ADR2G | MC74HC4051ADR2G |
| MC74HCT366ADR2G  | MC74HC4051ADR2G |
| MC74HC4052ADR2G  | MC74HC4051ADR2G |
| MC74HC4051ADR2G  | MC74HC4051ADR2G |
| MC74HC4040ADR2G  | MC74HC4051ADR2G |
| MC74HC4020ADR2G  | MC74HC4051ADR2G |
| MC74HC390ADR2G   | MC74HC4051ADR2G |



## Appendix A: Changed Products

PCN#: FPCN23653X  
Issue Date: Apr 12, 2021

| Product          | Customer Part Number | Qualification Vehicle | New Part Number | Replacement Supplier |
|------------------|----------------------|-----------------------|-----------------|----------------------|
| MC74HC112ADR2G   |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC138ADR2G   |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC139ADR2G   |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC151ADR2G   |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC153ADR2G   |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC157ADR2G   |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC160ADR2G   |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC161ADR2G   |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC163ADR2G   |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC165ADR2G   |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC174ADR2G   |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC175ADR2G   |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC238ADR2G   |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC251ADR2G   |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC365ADR2G   |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HCT595ADR2G  |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HCT4094ADR2G |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HCT4051ADR2G |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HCT259ADR2G  |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HCT138ADR2G  |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC597ADR2G   |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC595ADR2G   |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC589ADR2G   |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC4852ADR2G  |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC4851ADR2G  |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC4538ADR2G  |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC4094ADR2G  |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC4316ADR2G  |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC4060ADR2G  |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC4053ADR2G  |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC4052ADR2G  |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC368ADR2G   |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC4051ADR2G  |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC4040ADR2G  |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC4020ADR2G  |                      | MC74HC4051ADR2G       | NA              |                      |
| MC74HC390ADR2G   |                      | MC74HC4051ADR2G       | NA              |                      |