



成都莫什连接器有限公司

OLEX INTERCONNECT (CHENGDU) CO.,LTD

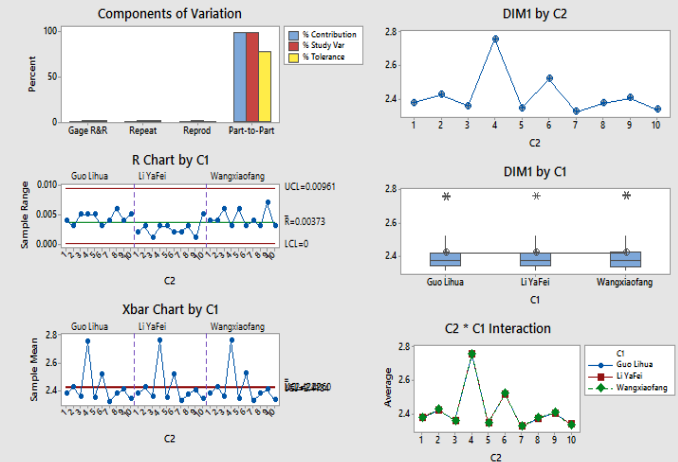
## TITLE MEASUREMENT SYSTEM EVALUATION PROCEDURE

| Molex<br>part No. | 3347104**-DIM1 |       |           |        | Date  | 10/24/2019 |        |       |
|-------------------|----------------|-------|-----------|--------|-------|------------|--------|-------|
| Inspector         | Sample         | DIM1  | Inspector | Sample | DIM1  | Inspector  | Sample | DIM1  |
| Wangxiaofang      | 1              | 2.375 | Guo Lihua | 1      | 2.374 | Li YaFei   | 1      | 2.376 |
| Wangxiaofang      | 2              | 2.424 | Guo Lihua | 2      | 2.420 | Li YaFei   | 2      | 2.424 |
| Wangxiaofang      | 3              | 2.360 | Guo Lihua | 3      | 2.358 | Li YaFei   | 3      | 2.359 |
| Wangxiaofang      | 4              | 2.761 | Guo Lihua | 4      | 2.754 | Li YaFei   | 4      | 2.760 |
| Wangxiaofang      | 5              | 2.341 | Guo Lihua | 5      | 2.347 | Li YaFei   | 5      | 2.347 |
| Wangxiaofang      | 6              | 2.523 | Guo Lihua | 6      | 2.518 | Li YaFei   | 6      | 2.518 |
| Wangxiaofang      | 7              | 2.325 | Guo Lihua | 7      | 2.320 | Li YaFei   | 7      | 2.325 |
| Wangxiaofang      | 8              | 2.376 | Guo Lihua | 8      | 2.374 | Li YaFei   | 8      | 2.372 |
| Wangxiaofang      | 9              | 2.402 | Guo Lihua | 9      | 2.406 | Li YaFei   | 9      | 2.405 |
| Wangxiaofang      | 10             | 2.334 | Guo Lihua | 10     | 2.340 | Li YaFei   | 10     | 2.341 |
| Wangxiaofang      | 1              | 2.379 | Guo Lihua | 1      | 2.378 | Li YaFei   | 1      | 2.377 |
| Wangxiaofang      | 2              | 2.428 | Guo Lihua | 2      | 2.423 | Li YaFei   | 2      | 2.421 |
| Wangxiaofang      | 3              | 2.356 | Guo Lihua | 3      | 2.357 | Li YaFei   | 3      | 2.359 |
| Wangxiaofang      | 4              | 2.759 | Guo Lihua | 4      | 2.757 | Li YaFei   | 4      | 2.761 |
| Wangxiaofang      | 5              | 2.343 | Guo Lihua | 5      | 2.342 | Li YaFei   | 5      | 2.345 |
| Wangxiaofang      | 6              | 2.520 | Guo Lihua | 6      | 2.517 | Li YaFei   | 6      | 2.520 |
| Wangxiaofang      | 7              | 2.323 | Guo Lihua | 7      | 2.319 | Li YaFei   | 7      | 2.323 |
| Wangxiaofang      | 8              | 2.379 | Guo Lihua | 8      | 2.373 | Li YaFei   | 8      | 2.371 |
| Wangxiaofang      | 9              | 2.406 | Guo Lihua | 9      | 2.410 | Li YaFei   | 9      | 2.404 |
| Wangxiaofang      | 10             | 2.331 | Guo Lihua | 10     | 2.339 | Li YaFei   | 10     | 2.336 |
| Wangxiaofang      | 1              | 2.377 | Guo Lihua | 1      | 2.378 | Li YaFei   | 1      | 2.378 |
| Wangxiaofang      | 2              | 2.426 | Guo Lihua | 2      | 2.422 | Li YaFei   | 2      | 2.423 |
| Wangxiaofang      | 3              | 2.362 | Guo Lihua | 3      | 2.362 | Li YaFei   | 3      | 2.358 |
| Wangxiaofang      | 4              | 2.762 | Guo Lihua | 4      | 2.752 | Li YaFei   | 4      | 2.758 |
| Wangxiaofang      | 5              | 2.347 | Guo Lihua | 5      | 2.347 | Li YaFei   | 5      | 2.348 |
| Wangxiaofang      | 6              | 2.522 | Guo Lihua | 6      | 2.520 | Li YaFei   | 6      | 2.518 |
| Wangxiaofang      | 7              | 2.321 | Guo Lihua | 7      | 2.323 | Li YaFei   | 7      | 2.324 |
| Wangxiaofang      | 8              | 2.378 | Guo Lihua | 8      | 2.379 | Li YaFei   | 8      | 2.374 |
| Wangxiaofang      | 9              | 2.409 | Guo Lihua | 9      | 2.406 | Li YaFei   | 9      | 2.405 |
| Wangxiaofang      | 10             | 2.332 | Guo Lihua | 10     | 2.335 | Li YaFei   | 10     | 2.338 |

### Gage R&R (ANOVA) Report for DIM1

Gage name: TM  
Date of study:

Reported by: Wangxiaofang  
Tolerance: 2.75+/-0.50  
Misc:



### Gage R&R Study - ANOVA Method

#### Gage R&R for DIM1

Gage name: TM  
Date of study: Wangxiaofang  
Tolerance: 2.75 +/- 0.50  
Misc:

#### Two-Way ANOVA Table With Interaction

| Source        | Df | SS      | MS       | F       | P     |
|---------------|----|---------|----------|---------|-------|
| C2            | 9  | 1.58751 | 0.154168 | 10754.5 | 0.000 |
| C1            | 2  | 0.00002 | 0.000008 | 0.6     | 0.580 |
| C2 * C1       | 18 | 0.00026 | 0.000014 | 3.3     | 0.000 |
| Repeatability | 60 | 0.00026 | 0.000004 |         |       |
| Total         | 89 | 1.58805 |          |         |       |

or to remove interaction term = 0.05

#### Gage R&R

##### Variance Components

| Source          | VarComp   | %Contribution (of VarComp) |
|-----------------|-----------|----------------------------|
| Total Gage R&R  | 0.000077  | 0.04                       |
| Repeatability   | 0.000044  | 0.08                       |
| Reproducibility | 0.000033  | 0.02                       |
| C1              | 0.000000  | 0.00                       |
| C1*C2           | 0.000033  | 0.02                       |
| Part To-Part    | 0.0171282 | 99.96                      |
| Total Variation | 0.0171359 | 100.00                     |

Process tolerance = 1

#### Gage Evaluation

| Source          | StdDev (SD) | Study Var (S + SD) | %Study Var (%SV) | %Tolerance (%V/Toler) |
|-----------------|-------------|--------------------|------------------|-----------------------|
| Total Gage R&R  | 0.002775    | 0.016640           | 2.12             | 1.66                  |
| Repeatability   | 0.002087    | 0.012522           | 1.59             | 1.25                  |
| Reproducibility | 0.001826    | 0.010958           | 1.40             | 1.10                  |
| C1              | 0.000000    | 0.000000           | 0.00             | 0.00                  |
| C1*C2           | 0.001826    | 0.010958           | 1.40             | 1.10                  |
| Part To-Part    | 0.130875    | 0.785248           | 99.98            | 78.52                 |
| Total Variation | 0.130904    | 0.785425           | 100.00           | 78.54                 |

Number of Distinct Categories = 66

#### Probabilities of Misclassification

##### Joint Probability

| Description                                   | Probability |
|-----------------------------------------------|-------------|
| A randomly selected part is bad but accepted  | 0.001       |
| A randomly selected part is good but rejected | 0.001       |

##### Conditional Probability

| Description                                      | Probability |
|--------------------------------------------------|-------------|
| A part from a group of bad products is accepted  | 0.015       |
| A part from a group of good products is rejected | 0.002       |

#### Gage R&R for DIM1