TOREX

# 管理計画 (USP-12B01)
# CONTROL PLAN (USP-12B01)

ﾄﾚｯｸｽ・ｾﾐｺﾝﾀﾞｸﾀｰ株式会社
TOREX SEMICONDUCTOR LTD.

代表例

| 工程記号<br>Flow | No. | 工程名<br>Process | 主な管理項目<br>Major item checked | 頻度<br>Frequency | ﾌﾟﾛｾｽ<br>Process |
|---|---|---|---|---|---|
| ◇ | 1 | ｳｴﾊ受入<br>Wafer incoming | ﾛｯﾄ番号, 員数照合<br>Lot No., Q'ty check | 抜き取り<br>Sampling | ｳｴﾊ工程(外注)<br>Wafer process |
| ○ | 2 | 酸化<br>Oxide | 時間, 温度<br>Temperature, Time | ﾁｭｰﾌﾞ交換時<br>Tube change | |
| ◇ | 3 | 酸化膜ﾁｪｯｸ<br>Oxide check | 外観, 酸化膜厚<br>Appearance, OX thickness | 抜き取り<br>Sampling | |
| ◇ | 4 | ﾁｪｯｸ<br>Check | 外観, 測定<br>Appearance, Measurement | 抜き取り<br>Sampling | |
| ○ | 5 | ﾌｫﾄ工程<br>Photo lithography | 品番照合<br>Against photo mask | 作業開始時<br>At Starting | |
| ◇ | 6 | ﾁｪｯｸ<br>Check | 外観, 欠陥密度<br>Appearance, Defect density | 抜き取り<br>Sampling | |
| ○ | 7 | 拡散<br>Drive | 温度, 時間<br>Temperature, Time | 作業開始時<br>At Starting | |
| ◇ | 8 | ﾁｪｯｸ<br>Check | ｼｰﾄ抵抗, 酸化<br>Sheet resistance, Oxidation | 抜き取り<br>Sampling | |
| ○ | 9 | 金属膜形成<br>Metal deposition | 真空度<br>Vacuumness | 作業開始時<br>At Starting | |
| ◇ | 10 | ﾒﾀﾙﾁｪｯｸ<br>Metal check | 外観, 厚み, 表面状態<br>Appearance , Thickness, Surface | 抜き取り<br>Sampling | |
| ◇ | 11 | ｳｴﾊﾁｪｯｸ<br>Wafer check | 測定<br>Process Control Monitor | 抜き取り<br>Sampling | |
| ◇ | 12 | ｳｴﾊﾃｽﾄ<br>Wafer test | 電気的特性<br>Electrical characteristics | 100% | |
| ○ | 13 | ﾚｰｻﾞｰﾄﾘﾐﾝｸﾞ<br>Laser trimming | ﾚｰｻﾞｰﾊﾟﾜｰ, ﾄﾘﾐﾝｸﾞ箇所<br>Laser power, Location of shots | 作業開始時<br>At Starting | |
| ○ | 14 | ﾀﾞｲｼﾝｸﾞ<br>Dicing | 位置ずれ, ﾌﾞﾚｰﾄﾞの磨耗<br>Position, Blade Condition | 作業開始時<br>At Starting | 組立工程(外注)<br>Assembly process |
| ○ | 15 | ﾀﾞｲﾎﾞﾝﾄﾞ<br>Die attach | 位置, 塗布量<br>Position, Amount of Coating | 抜き取り<br>Sampling | |
| ○ | 16 | ﾜｲﾔﾎﾞﾝﾃﾞｨﾝｸﾞ<br>Wire bonding | 外観, 位置, ﾙｰﾌﾟ, 引張強度<br>ﾎﾞｰﾙｼｪｱ, ﾀﾞｲｼｪｱ<br>Appearance, Position,<br>Loop shape, Wire pull strength,<br>Ball share strength,<br>Die share strength | 抜き取り<br>Sampling | |
| ○ | 17 | ﾓｰﾙﾃﾞｨﾝｸﾞ<br>Molding | 外観, X線検査<br>Appearance, X-ray check | 抜き取り<br>Sampling | |
| ○ | 18 | ﾏｰｷﾝｸﾞ<br>Marking | 外観<br>Appearance | 抜き取り<br>Sampling | |
| ○ | 19 | 基板分割<br>Separating | 外観<br>Appearance | | |
| ◇ | 20 | 電気的特性検査<br>外観検査<br>ﾃｰﾋﾟﾝｸﾞ<br>Electrical test<br>Visual check<br>Taping | 電気的特性<br>ﾏｰｸ<br>ﾃｰﾋﾟﾝｸﾞ強度<br>Electrical characteristics<br>Mark<br>Taping strength | 100%<br>100%<br>1回/日<br>100%<br>100%<br>Per day | |
| ◇ | 21 | 出荷検査<br>Out going inspection | ﾗﾍﾞﾙ, 外観検査<br>Label, Appearance | 抜き取り<br>Sampling | |
| ○ | 22 | 梱包出荷<br>Packing /Shipping | 伝票照合<br>Verification of product<br>against slip | 1回/ロット<br>Per lot | |

Ver.01