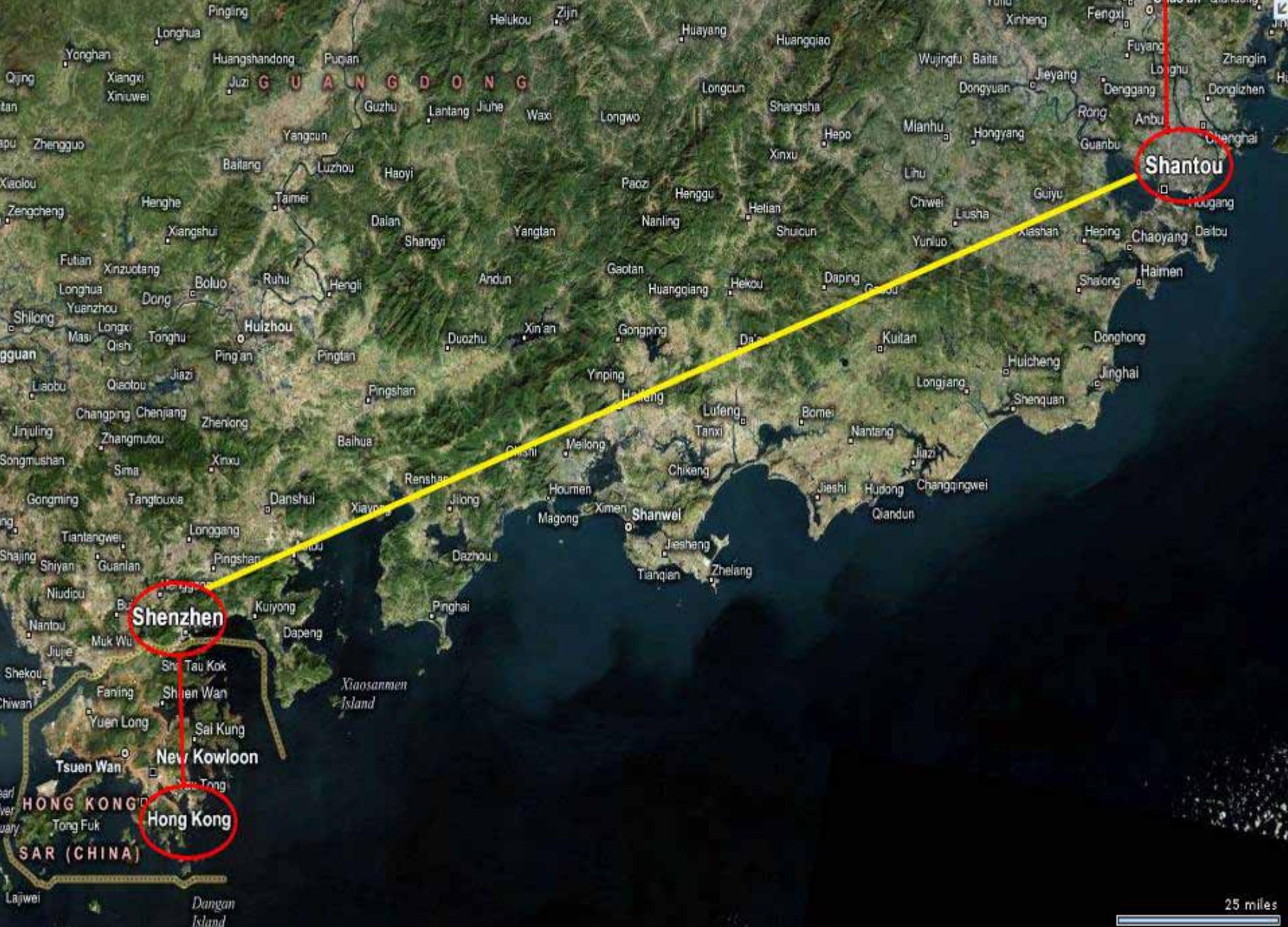


# Electronics Market - Shenzhen China







**Washing  
parts in  
river**



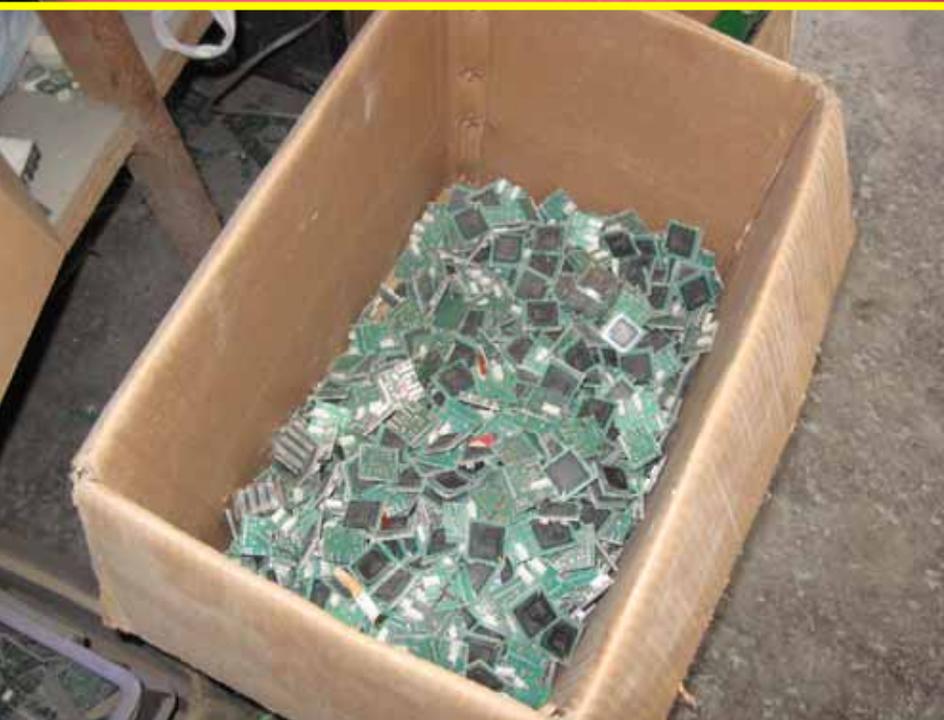
**Parts drying  
on  
riverbank**





# E-Waste feedstock for counterfeits





BCS  
29LV800TC  
-70

MEM  
29LV320FE  
-70

LH28F160BVHE  
-TTL90

三丰 DDR  
16x16  
K4D551638F-36  
K4D551638F-40  
K4D551638F-50

三丰 BGA  
K4S56163LF-XG75  
K4S511638F-PL1L  
K4D2632309-90

DDR  
8x16  
K4D261638F-7c40  
K4D261638I-7c50

DDR  
8x16 16x16  
HY5DV281622ET-J  
HY5DV281622ET-J  
HY5DV281622ET-002

南2 DDR  
NT5PS8M16FS-91  
NT5PS8M16FS-51

DDR  
8x16  
VT3212162T-6

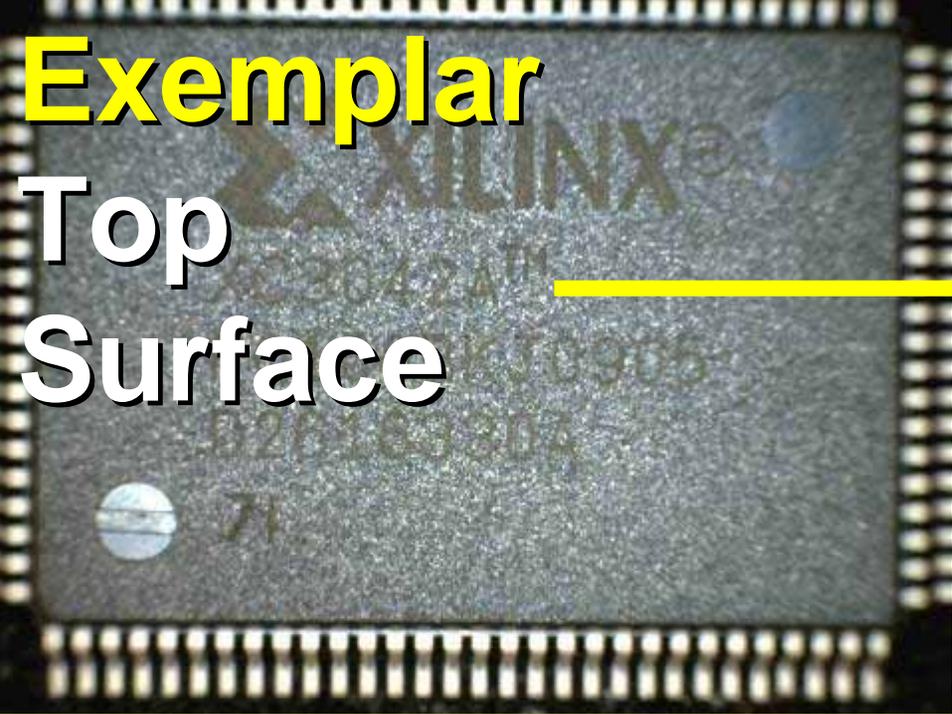
DDR 16x16  
K4H561638H-U000  
K4H561638H-U001

SF5109180W

W491107A-70

**Exemplar**

**Top  
Surface**



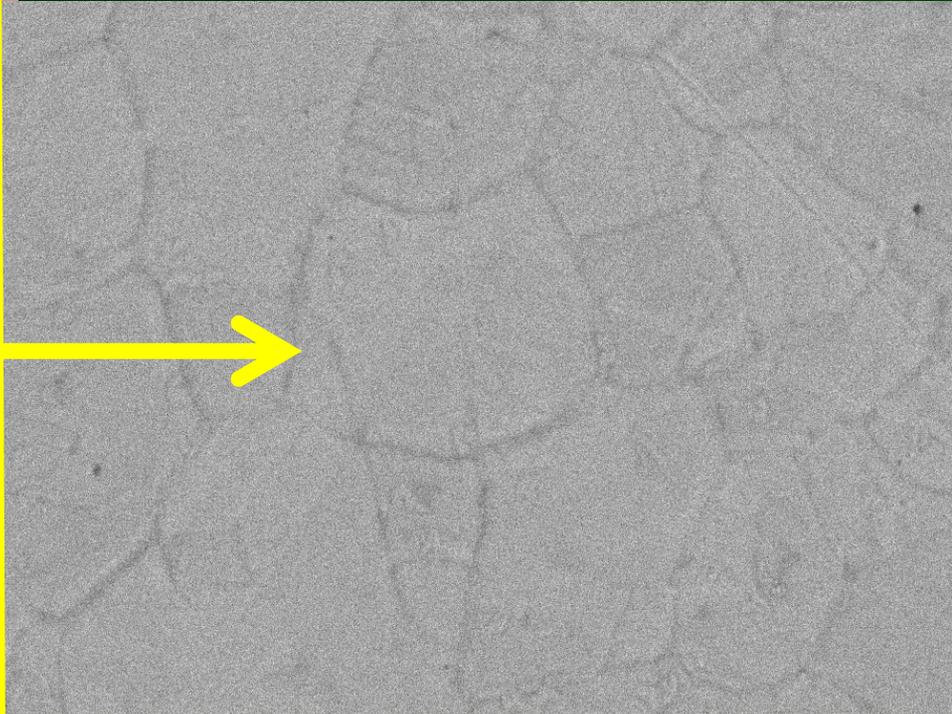
**Suspect**  
**Top  
Surface**



**Exemplar**

**Surface**

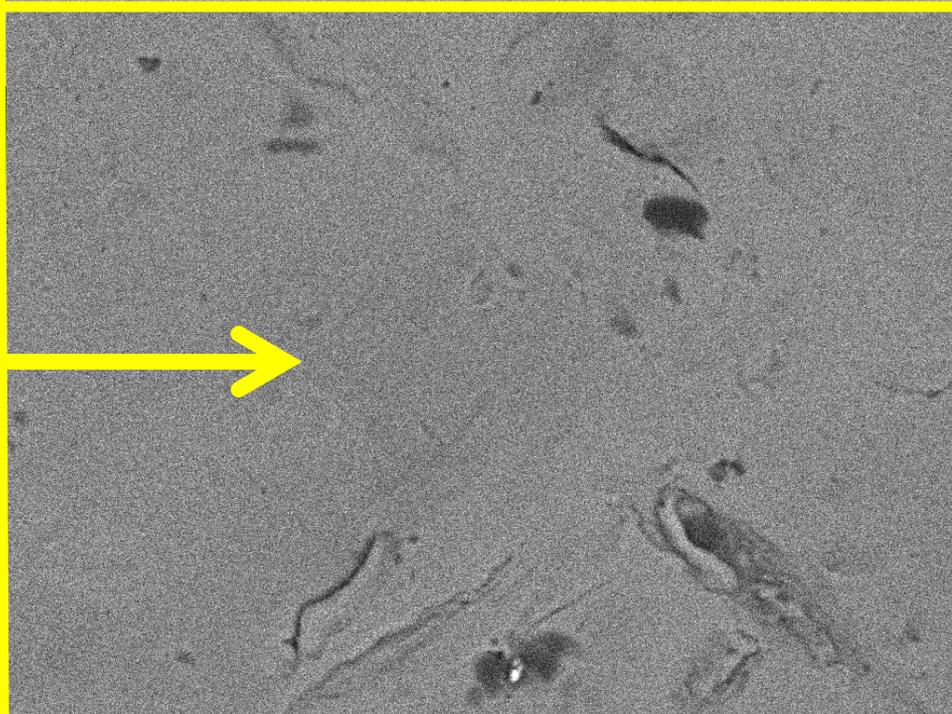
**5000x**



**Suspect**

**Surface**

**5000x**

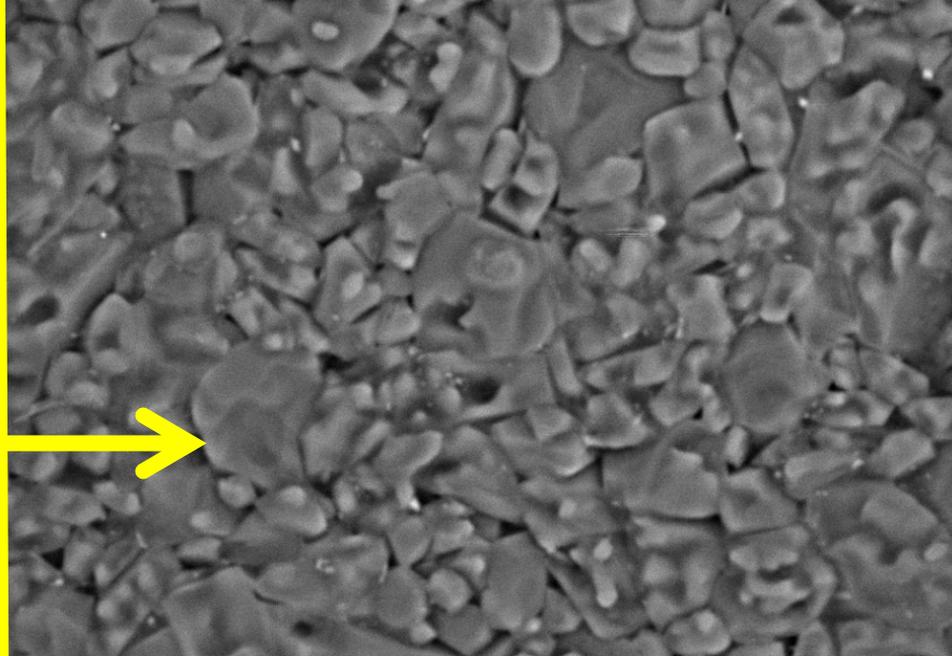


# Exemplar

## Surface

### 5000x

 XILINX®  
XC4010™ -6  
PG191C  
X27730M  
BKG9337



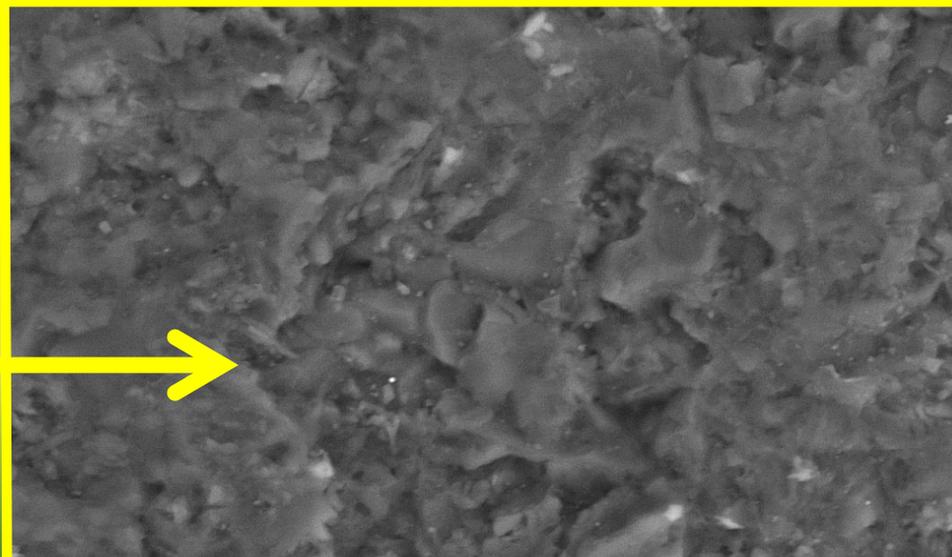
SEM HV: 20 kV	WD: 13.91 mm		VEGA3 TESCAN
View field: 57.9 μm	Det: BSE	10 μm	
SEM MAG: 4.99 kx	SM: RESOLUTION		

# Suspect

## Surface

### 5000x

 XILINX®  
XC4010™ -6  
PG223ARJ0645  
F38847A  
5C



SEM HV: 20 kV	WD: 12.36 mm		VEGA3 TESCAN
View field: 50.7 μm	Det: BSE	10 μm	
SEM MAG: 5.69 kx	SM: RESOLUTION		

# Counterfeit Problem Perception



Global Impact on Industry



Reality of the Counterfeit Problem

