FNAL/US-CMS:
Gel-Pak Maps
Fermilab P.O. #562849

J.S. 4-July-2005

CENTER FOR MICROELECTRONICS

Micropackaging Group

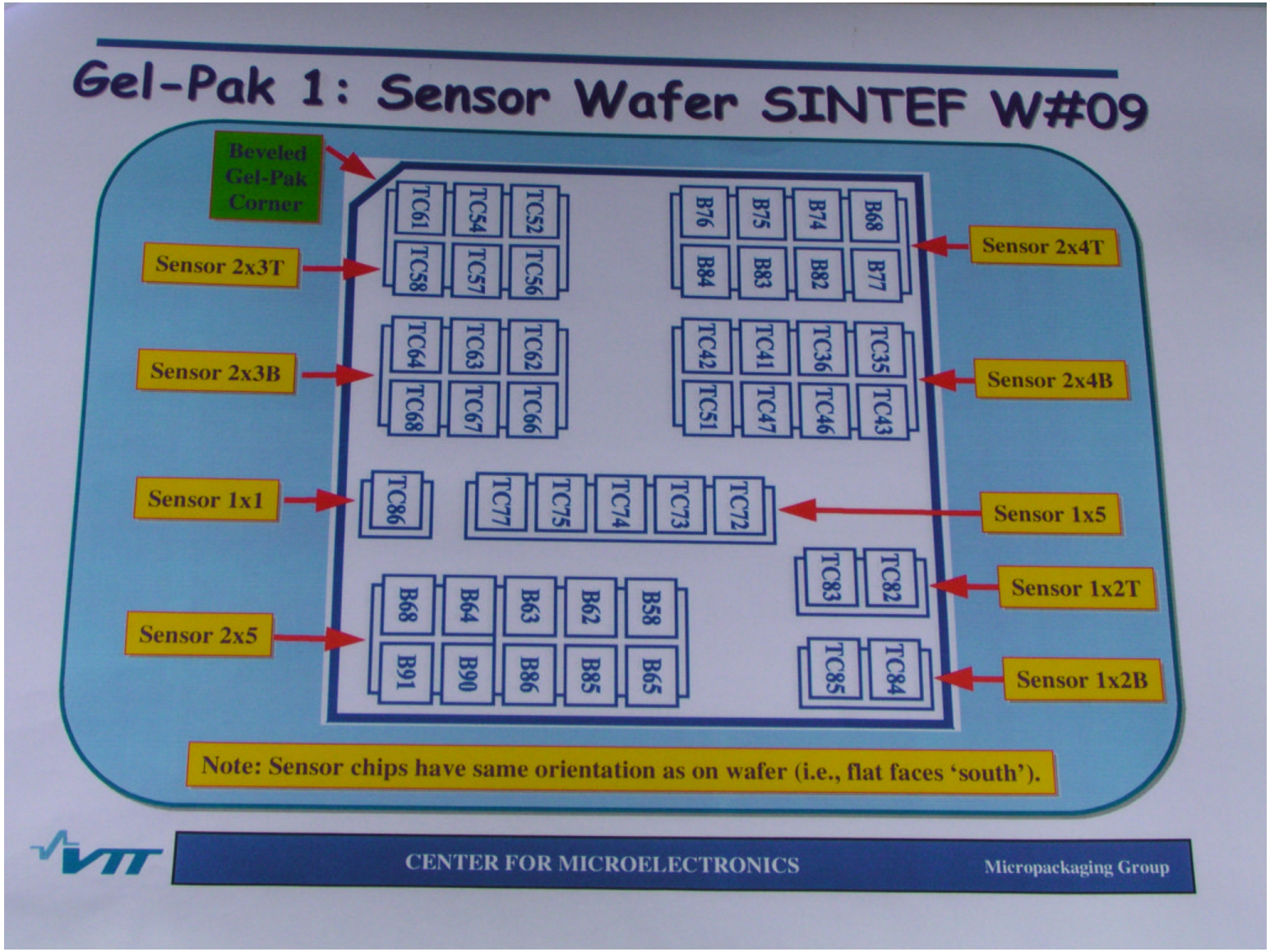
Notes on Gel-Paks

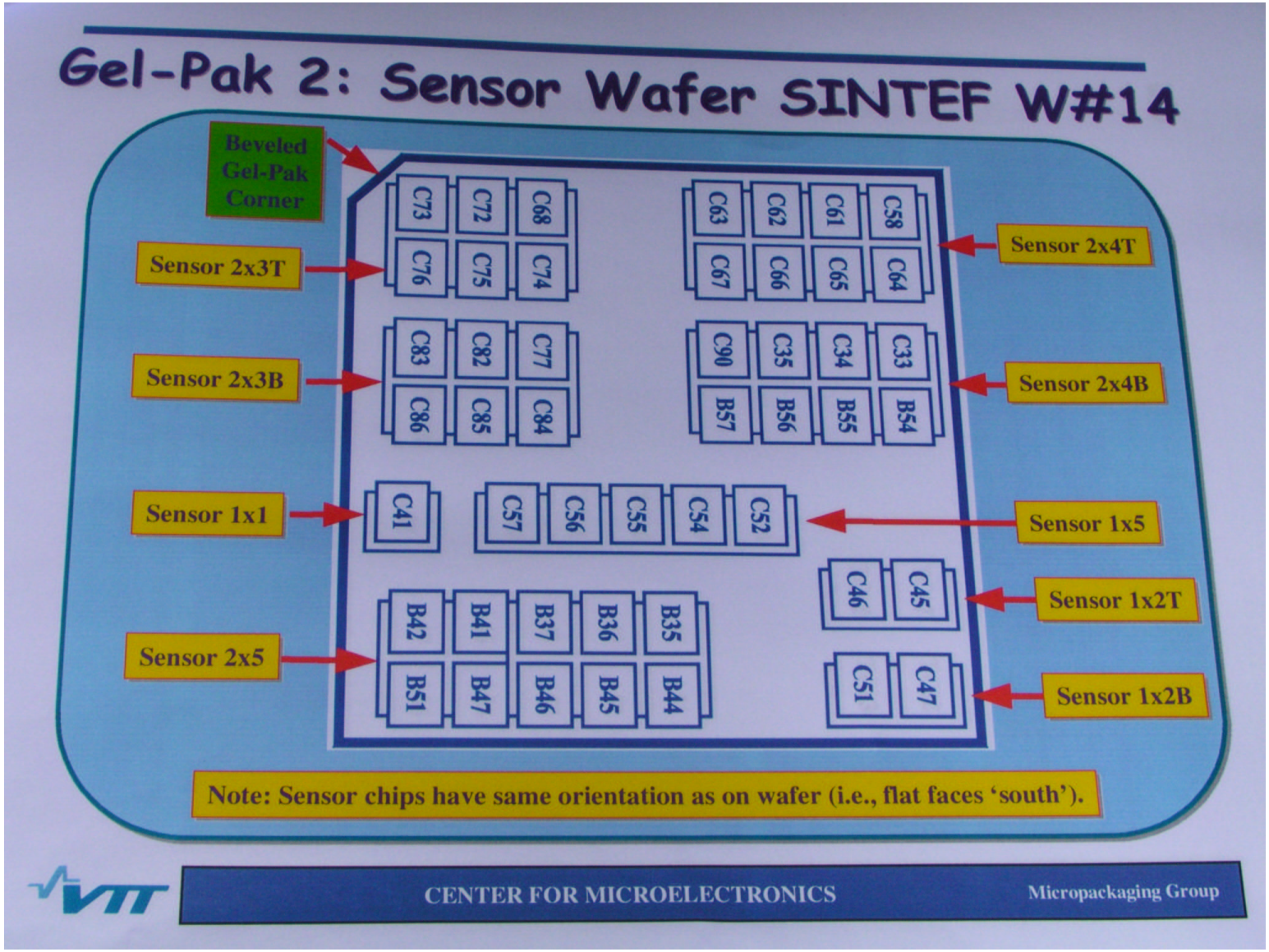
- The components have been packaged and sealed in VTT's Class-10 clean room.
- You will need a special vacuum release tool to enable removing the components from the Gel-Pak vacuum release trays. Do NOT try to remove them without such a tool!
- After having applied vacuum, please be patient and wait for a few minutes before trying to remove the components. It is safest to touch only the sensor chip (the lower) part when removing the detectors.
- The Gel-Paks are re-usable, and are generally the safest way to store and transport this kind of components.
- For more information on Gel-Paks, go to http://www.gelpak.com/products/vr_tray.html

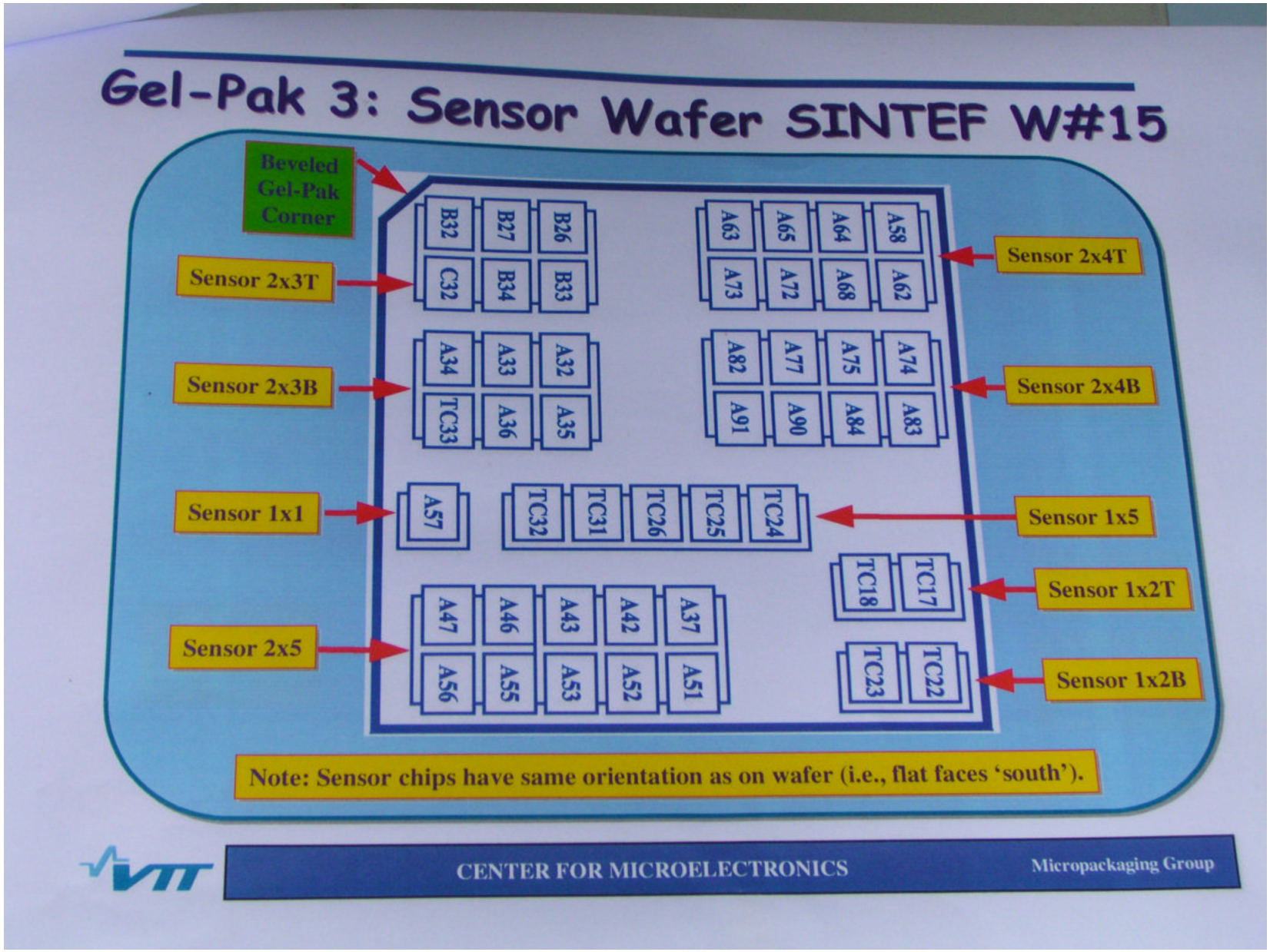
VTT CENTER FOR MICROELECTRONICS Micropackaging Group

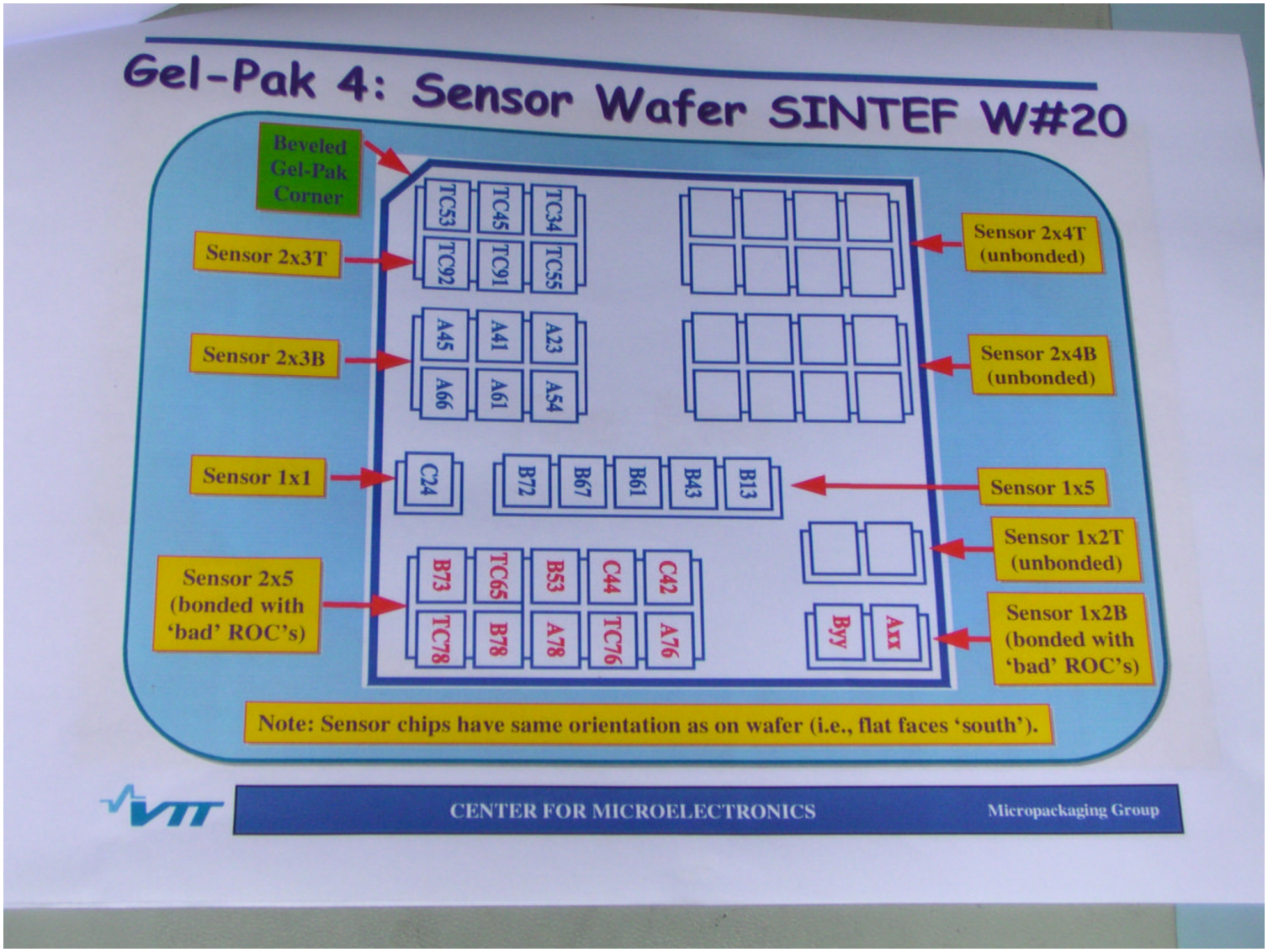
Gel-Pak Maps

- The maps on the following pages show the locations of the detectors in the Gel-Paks.
- The assembled detectors are in four labeled 4"x4" Gel-Paks; one Gel-Pak for sensor wafer SINTEF W#09, one Gel-Pak for sensor wafer SINTEF W#14, one Gel-Pak for sensor wafer SINTEF W#15, and one for SINTEF W#20.--W#20 could not be completed because of lack of good readout chips (some placements were made with bad ROC's).
- All readout chips came from W#A3CN6EX.
- The type of each readout chip (A, B, C, or TC) is marked on the maps, in addition to the chip number. 'Bad' chips (W#20) are labeled in red.
- The sensor chip numbers are also shown. The orientation of the sensor chips in the Gel-Paks is the same as it was on the wafers (the large flat faces 'south').


Gel-Pak 1: Sensor Wafer SINTEF W#09
Beveled Gel-Pak Corner
Sensor 2x3T
Sensor 2x3B
Sensor 1x1
Sensor 2x5
Sensor 2x4T
Sensor 2x4B
Sensor 1x5
Sensor 1x2T
Sensor 1x2B
TC61 TC54 TC52
TC58 TC57 TC56
B76 B75 B74 B68
B84 B83 B82 B77
TC64 TC63 TC62
TC68 TC67 TC66
TC42 TC41 TC36 TC35
TC51 TC47 TC46 TC43
TC86
TC77 TC75 TC74 TC73 TC72
TC83 TC82
TC85 TC84
B68 B64 B63 B62 B58
B91 B90 B86 B85 B65
Note: Sensor chips have same orientation as on wafer (i.e., flat faces 'south').
VTT
CENTER FOR MICROELECTRONICS
Micropackaging Group

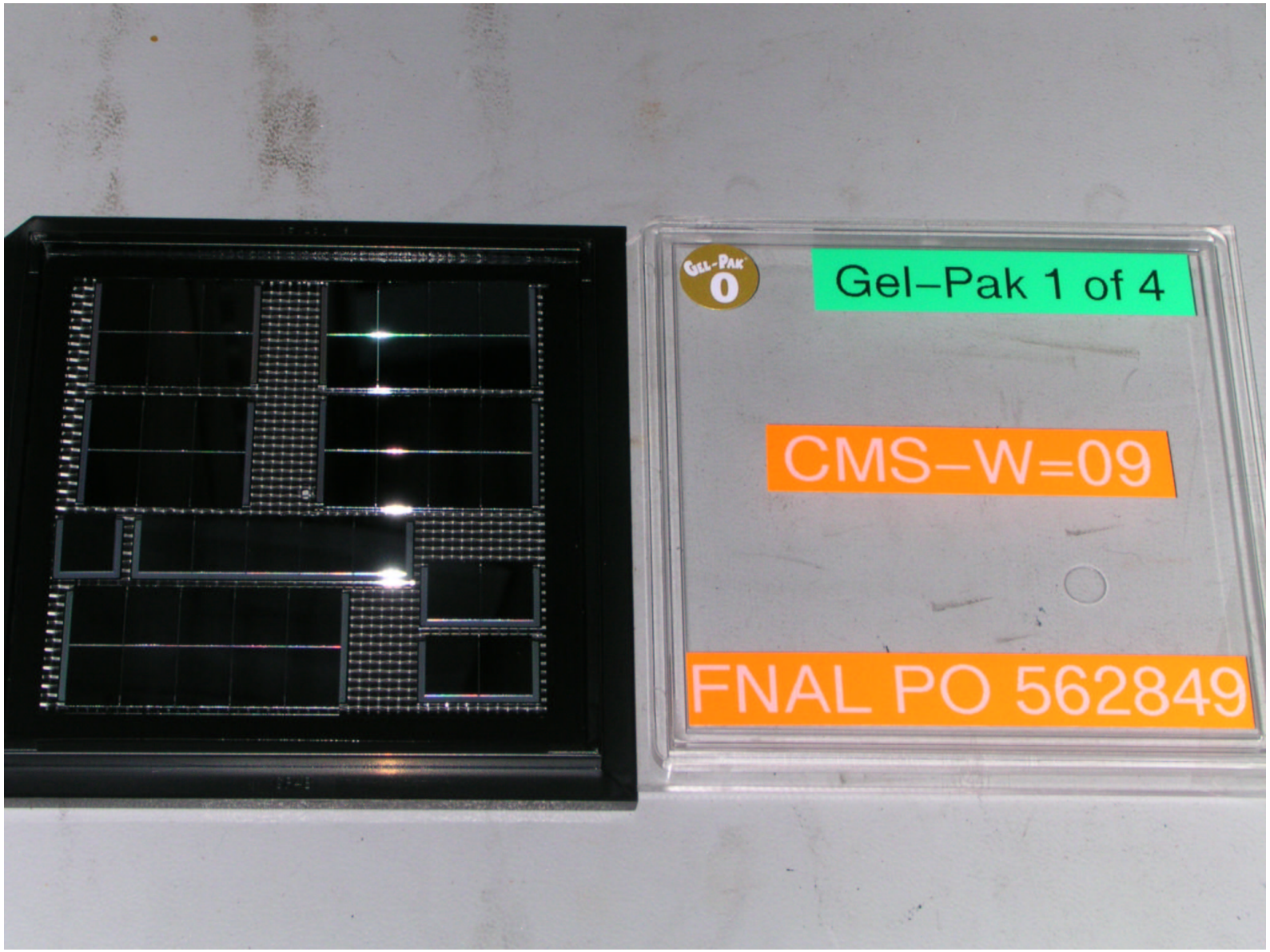

Gel-Pak 2: Sensor Wafer SINTEF W#14
Beveled Gel-Pak Corner
Sensor 2x3T
Sensor 2x3B
Sensor 1x1
Sensor 2x5
Sensor 2x4T
Sensor 2x4B
Sensor 1x5
Sensor 1x2T
Sensor 1x2B
C73 C72 C68
C76 C75 C74
C63 C62 C61 C58
C67 C66 C65 C64
C83 C82 C77
C86 C85 C84
C90 C35 C34 C33
B57 B56 B55 B54
C41
C57 C56 C55 C54 C52
C46 C45
C51 C47
B42 B41 B37 B36 B35
B51 B47 B46 B45 B44
Note: Sensor chips have same orientation as on wafer (i.e., flat faces 'south').
VTT
CENTER FOR MICROELECTRONICS
Micropackaging Group

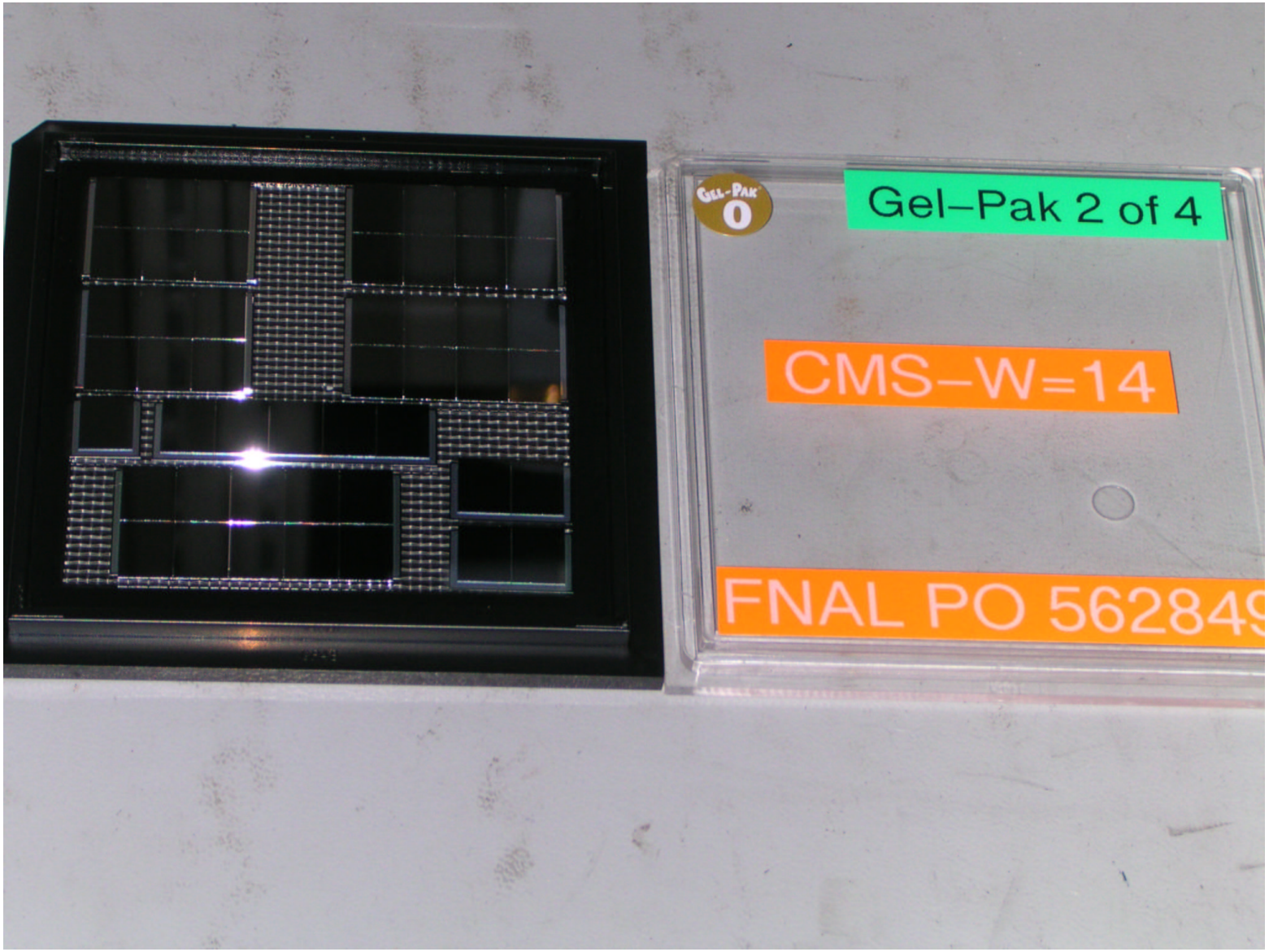

Gel-Pak 3: Sensor Wafer SINTEF W#15
Beveled Gel-Pak Corner
Sensor 2x3T
Sensor 2x3B
Sensor 1x1
Sensor 2x5
Sensor 2x4T
Sensor 2x4B
Sensor 1x5
Sensor 1x2T
Sensor 1x2B
B32 B27 B26
C32 B34 B33
A34 A33 A32
TC33 A36 A35
A57
A47 A46 A43 A42 A37
A56 A55 A53 A52 A51
A63 A65 A64 A58
A73 A72 A68 A62
A82 A77 A75 A74
A91 A90 A84 A83
TC32 TC31 TC26 TC25 TC24
TC18 TC17
TC23 TC22
Note: Sensor chips have same orientation as on wafer (i.e., flat faces 'south').
VTT
CENTER FOR MICROELECTRONICS
Micropackaging Group

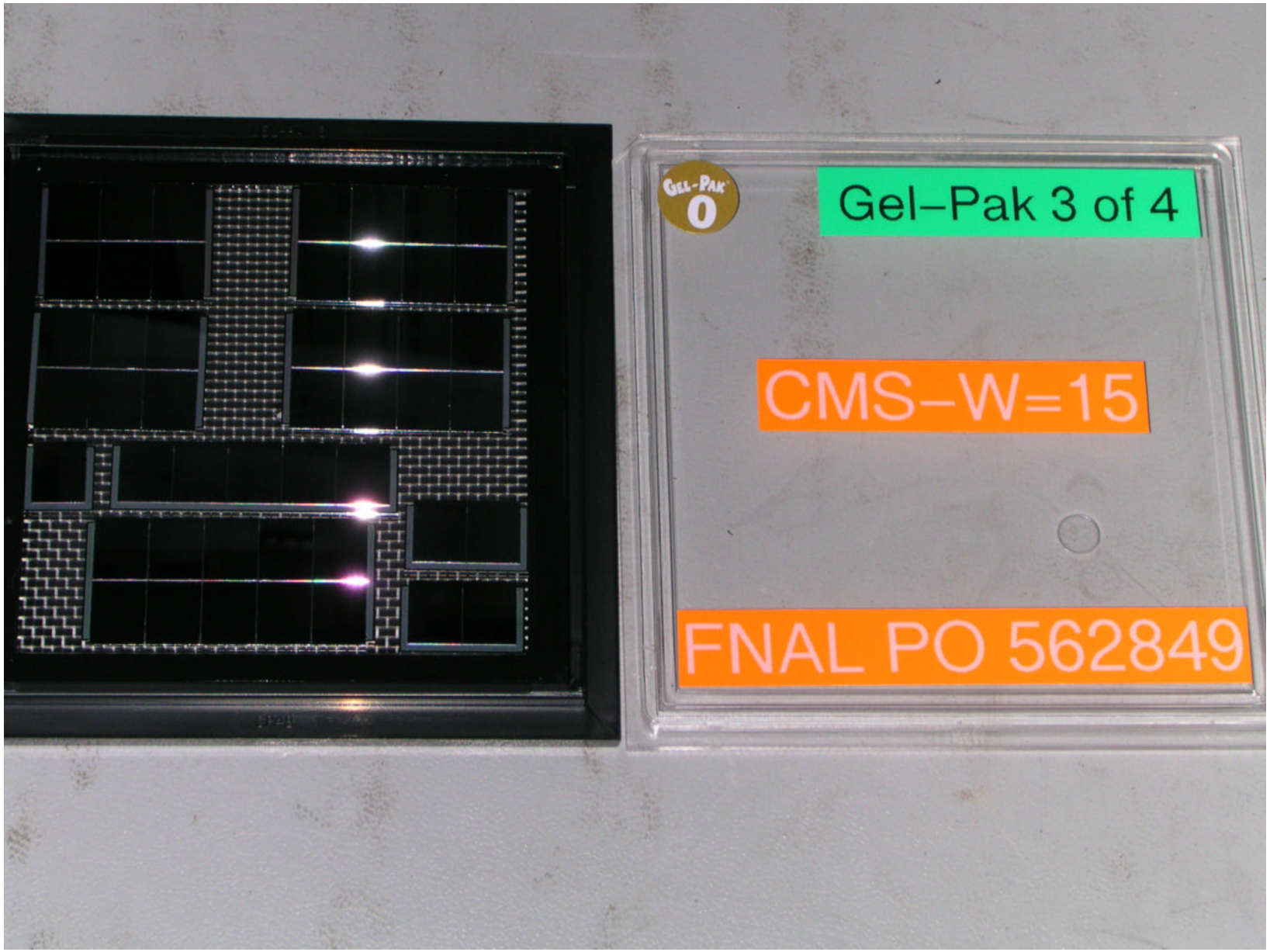

Gel-Pak 4: Sensor Wafer SINTEF W#20
Beveled Gel-Pak Corner
Sensor 2x3T
Sensor 2x3B
Sensor 1x1
Sensor 2x5 (bonded with 'bad' ROC's)
Sensor 2x4T (unbonded)
Sensor 2x4B (unbonded)
Sensor 1x5
Sensor 1x2T (unbonded)
Sensor 1x2B (bonded with 'bad' ROC's)
TC53
TC45
TC34
TC92
TC91
TC55
A45
A41
A23
A66
A61
A54
C24
B72
B67
B61
B43
B13
B73
TC65
B53
C44
C42
TC78
B78
A78
TC76
A76
Byy
Axx
Note: Sensor chips have same orientation as on wafer (i.e., flat faces 'south').
VTT
CENTER FOR MICROELECTRONICS
Micropackaging Group

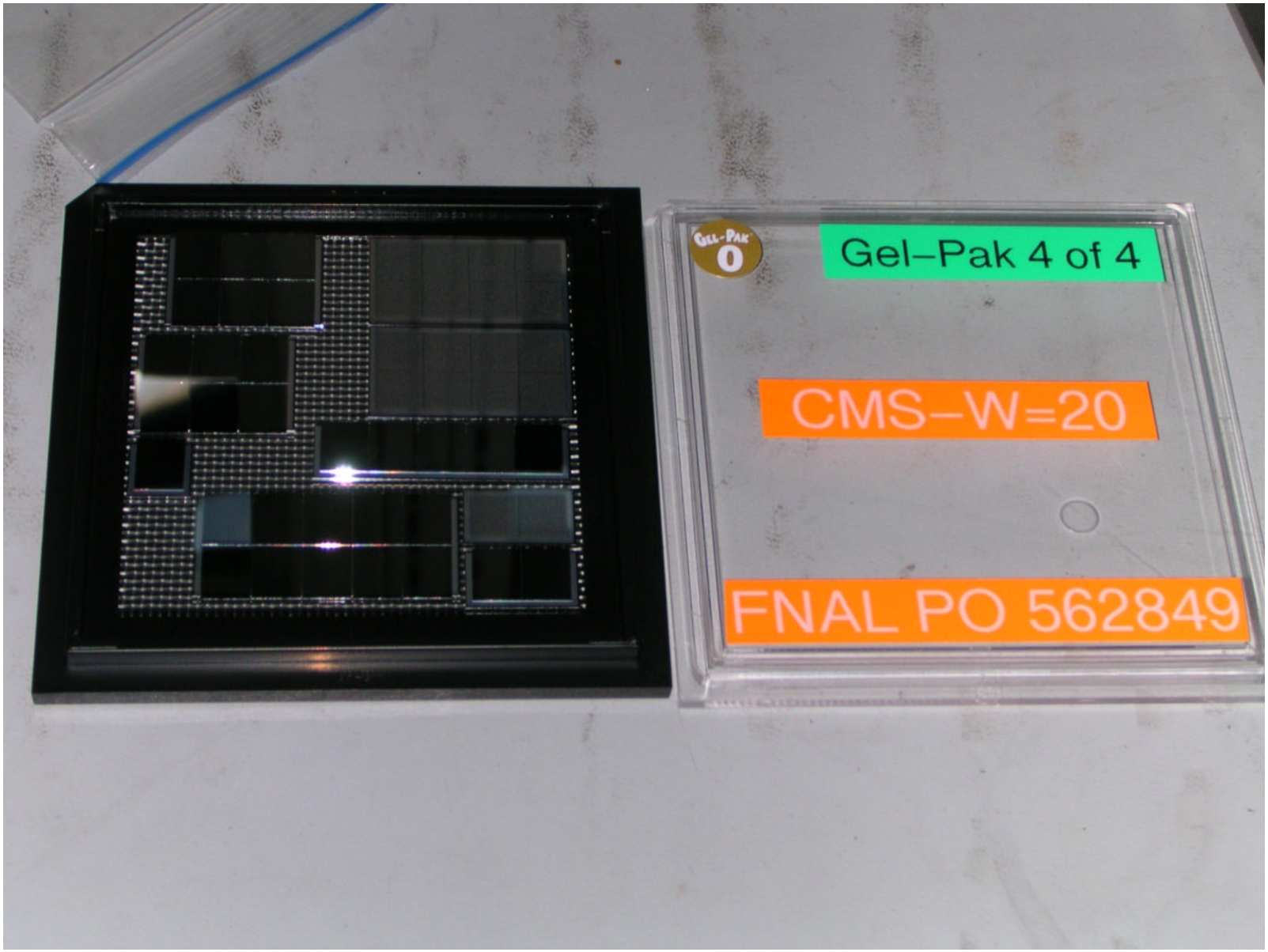
Gel–Pak 1 of 4
CMS–W=09
FNAL PO 562849
Gel–Pak 2 of 4
CMS–W=14
FNAL PO 562849
Gel–Pak 3 of 4
CMS–W=15
FNAL PO 562849
Gel–Pak 4 of 4
CMS–W=20
FNAL PO 562849

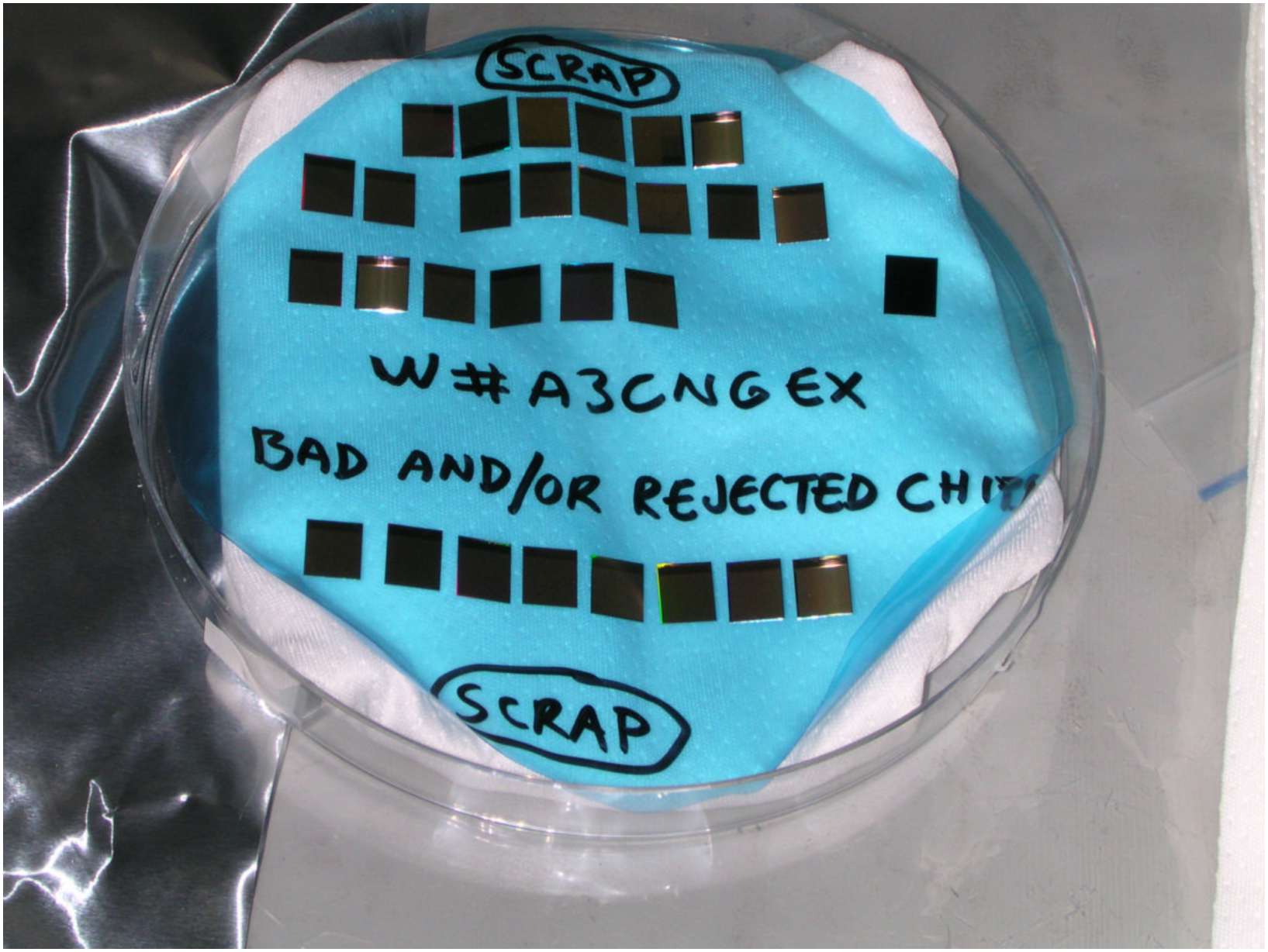
Leftover pieces
(scrap)
FNAL PO:562849

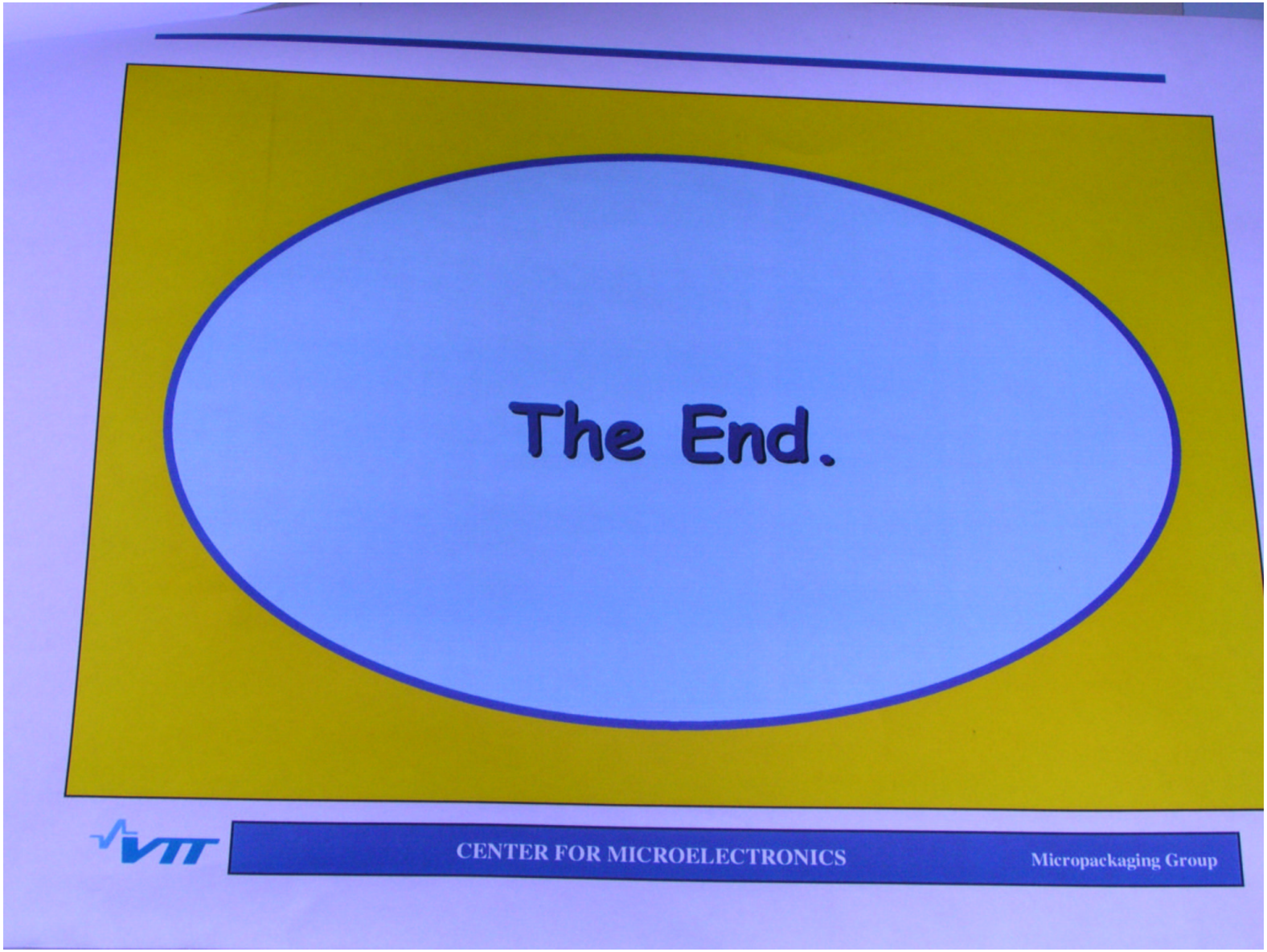

GEL-PAK
0
Gel–Pak 1 of 4
CMS–W=09
FNAL PO 562849


GEL-PAK
0
Gel–Pak 2 of 4
CMS–W=14
FNAL PO 562849


GEL-PAK
0
Gel–Pak 3 of 4
CMS–W=15
FNAL PO 562849


GEL-PAK
0
Gel–Pak 4 of 4
CMS–W=20
FNAL PO 562849


SCRAP
W#A3CNGEX
BAD AND/OR REJECTED CHI
SCRAP


The End.
VTT
CENTER FOR MICROELECTRONICS
Micropackaging Group