

test results for ppl4.00 chips:

ms3w chips 1-28 came from first batch (not VTI for wafers)

ms3y (chips 29-43 came in second batch (VTI wafers)  
chips 44-96 came in third batch (VTI wafers)

#1 Terak some right  
5MHz all bytes = 0x40 on clear; all bytes = 0xfa on allones

#2 Terak always 11111010  
5MHz

#3 Terak top half close, bottom some  
5MHz close, but numerous bad bits on all tests, that seem to be in the lower HP

#4 Terak 241's and 209's  
5MHz pixels 8-23 and 40-55 stuck mostly at 1's in all across  
tree seems to be working

#5 Terak all 0's out  
5MHz set pretty good, many fail to clr; a1,a2,tr give mostly 1's

#6 Terak CHECK  
5MHz memory tests CHECK  
tree had a few errors esp. byte 1, bit 1

#7 Terak CHECK  
5MHz

#8 Terak close, VData1 output looks bad  
5MHz intermittent, but all tests were perfect at least once

#9 Terak some life, stuck bits  
5MHz looks good  
ScOut seems to be stuck at 0

#10 Terak all 1's  
5MHz memory seems ok, ALU's messed up,  
maybe in control section

#11 Terak a little life  
5MHz fine, except pixel #61 has some bits stuck at 0

#12 Terak CHECK  
5MHz CHECK

#13 Terak some life  
5MHz confis res behaves like it is all 0's,  
that is, all pixels seem to be 0x0

#14 Terak all 1's out  
5MHz memory mostly stuck at 1's

#15 Terak all 1's  
5MHz looks good, with a bad bit or 2  
ScOut seems to be stuck at 0

#16 Terak some life  
5MHz messed up in alu/memory

#17 Terak mostly ok  
5MHz not bad, but too many bad pixels and columns

#18 Terak all 1's  
5MHz mostly good, with a few bad bits

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#19 Terak some life
5MHz processors look messed up

#20 Terak mostly = correct value - 2
5MHz memory is fine, confis seems off

Terak all 1's when results should appear
5MHz messed up badly

#22 Terak some life
5MHz not bad, but pixels 33,34,35,57 bad and
      3 bad columns in byte 7

#23 Terak all 1's
5MHz all 1's under all tests

#24 Terak bit 2 stuck at 0
5MHz pixel 7 bad, VDet2 output looks bad

#25 Terak CHECK
5MHz mostly good, with a few bad bits
Now, suddenly, the lower half-plane is partly fucked up. Don't

#26 Terak a little life
5MHz many funky random errors, esp. in bottom HP

#27 Terak CHECK
5MHz pixels 10 and 11 bad, a few bad bits in pixel 62

#28 ScTerak mostly right, ScOut no good
5MHz ??

?MHz sctst ok; pixels 1 and 14 bad

#30 ?MHz sctst ok; pixel 53 bad, bit 2 of byte 4 bad

#31 *?MHz sctst ok; pixel 32 ms be bad

#32 ?MHz sctst ok; ei tst gives all 0's

#33 ?MHz sctst ok; pixel 41 bad

#34 ?MHz sctst ok; pixel 3 bad

#35 x?MHz sctst ok; perfect ?

#36 ?MHz sctst ok; pixels 17,18,19,50 bad

#37 B?MHz sctst BAD; others BAD

#38 B?MHz sctst ok; video outputs all 1's

#39 P?MHz sctst ok; pixels 16 and 17 bad

#40 *?MHz sctst ok; perfect ?

#41 4?MHz sctst ok; perfect ?

#42 B?MHz sctst BAD (all 1's); video outputs all 1's

#43 0?MHz sctst ok; pixel 43 bad
      pixel 48 also looked bad after inseertion into sdustea

#44 P?MHz sctst ok; pixels 16 and 17 bad

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(10 min prog demo)  
137n (145-3p)

(477  
53-  
60  
78  
67

#46 H8MHz sctst ok; upper half-plane messed up on memory and tree tests

#47 p8MHz sctst ok; others messed up

#48 8MHz sctst ok; pixel 30 is bad; Vdat4 output appears stuck at 1

#49 8MHz sctst ok; byte 8 is funny, particularly the MSB

#50 y8MHz sctst ok; upper half-plane and pixel 53 all messed up

#51 8MHz sctst ok; pixel 51 bad  
upon use in system, pixel 15 looked bad, worse than 51 i  
and then, later, the upper half-plane went wierd

#52 8MHz sctst ok; pixel 56 bad, and byte 8 stuck at all 0's  
obuf (bits 32-46) didn't seem to work in system

#53 G8MHz sctst ok; bytes 4-7 stuck at all 0's; tree looks ok

#54 H8MHz sctst ok; lower half plane all messed up

#55 y8MHz sctst ok; looks perfect

#56 P8MHz sctst ok; pixels 16 and 17 bad; bit 2 of all bytes in pixel 32 b

#57 8MHz sctst ok; bits 2 and 3 of byte 3 stuck at 0, some other pixel ok

#58 \*8MHz sctst ok; almost perfect

#59 8MHz sctst ok; pixel 55 bad, pixel 52 less bad

#60 \*8MHz sctst ok; perfect ??

#61 \*8MHz sctst ok; perfect except for maybe tree on pixel 32

#62 ?8MHz sctst ok; memory ok except pixel 49, tree all messed up

#63 \*8MHz sctst ok; perfect except for maybe tree on pixel 32

#64 G8MHz BAD; scanpath all 0's out; all video outputs stuck at 1's

#65 \*8MHz sctst ok; perfect except for maybe tree on pixel 32

#66 8MHz sctst ok; very good, but a few bad bits on tree test

#67 \*8MHz sctst ok; perfect, except maybe a few random bad bits

#68 G8MHz sctst ok; memory tests perfect, tree messed up on MSB's

#69 \*8MHz sctst ok; perfect except for maybe tree on pixel 32

#70 \*8MHz sctst ok; perfect except for maybe tree on pixel 32

#71 g8MHz sctst ok; clr and one ok; a1 gives 56, a2 gives ab, tree messed

#72 8MHz sctst ok; mem tests perfect except pixels 6 & 7;  
tree test save Vdat0 always 0

#73 B8MHz sctst ok; video outputs stuck at all 1's

#74 D8MHz sctst ok; mem tests perfect, tree messed up on 32 (?) and 63 (Vd  
\*\* behaved wierdly when put in a board and used

#75 8MHz sctst ok; pixel 58 stuck at 1's

#76 \* 8MHz setst ok; perfect except a few random bits

#77 8MHz setst BAD; otherwise very good except pixel 24

#78 P 8MHz setst ok; pixels 16, 17, 55 bad

#79 B 8MHz setst ok; video outputs stuck at all 1's

#80 \* 8MHz setst ok; perfect

#81 8MHz setst ok; pixels 52 and 55 bad

#82 8MHz setst ok; pixel 34 bad, some wierdness in byte 8  
pixel 60 also looked bad when used in system

#83 8MHz setst ok; bytes 1,3,5,7 all 0's; tree looks ok

#84 \* 8MHz setst ok; perfect ?

#85 O 8MHz setst ok; pixel 56 bad, pixel 32 funny on tree test

#86 B 8MHz setst ok; video outputs stuck at all 1's

#87 \* 8MHz setst ok; pixel 32 funny on tree test

#88 B 8MHz setst ok; other tests undecipherable bad

#89 8MHz setst ok; pixel 32 funny on tree test, byte 8 mostly bad

#90 \* 8MHz setst ok; pixel 32 funny on tree test;  
but VDat2 looked stuck at 0 at first but then went away

#91 P 8MHz setst ok; pixels 16 and 17 bad  
\*\* whole upper HP went wierd after running in system a while

#92 \* 8MHz setst ok; very good, with a few random bad bits

#93 B 8MHz setst ok; all messed up

#94 H 8MHz setst ok; upper half plane all messed up

#95 8MHz setst ok; mem tests perfect, tree test has random bad bits

#96 H 8MHz setst ok; lower HP messed up, VDat4 stuck at 1 on all pixels

\* - perfect  
H - mainly one HP failure  
O - mainly 1 pixel failure  
P - mainly pixel-pair failure  
B - really bad

~~20, 30, 31, 32, 36, 43, 48, 49, 51, 52, 53, 57, 59, 66, 71, 77, 81, 82, 83,~~  
89, 95, 96

not bad: (but not usable):  
20, 30, 31, 32, 36, 43, 48, 49, 51, 52, 53, 57, 59, 66, 71, 77, 81, 82, 83,  
89, 95, 96

really bad: 37, 38, 42, 47, 53, 62, 64, 68, 71, 73, 74,  
79, 86, 88, 93