

Viera Plasma Display PC Board Recycling Component Level Repair



ideas for life

Curriculum Content

Course 1

- PCI PCB Recycling Program/Process
 - Model line-up/PC board functionality

Course 2

- PCB Recycling Component Level Repair Techniques

Course 3

- Understanding How System Shut Down Operates

Course 4

- Troubleshooting Hints / Common Symptoms

END

Procedure for Returning Returnable PC board

Servicentre determines a returnable PC board is defective.



Servicentre orders replacement PC board from Panasonic National Parts



After repairing the product, servicentre returns the following to Panasonic National Parts:

- Returnable PC board/part
- Completely fill out Returnable Parts Report form



Once Panasonic National Parts receives the defective sub-assembly with all the required documents, They will:

- Forward a copy of Returnable Parts form to NWCS then payment is issued to the servicentre.
- Note: for O/W: NP Issues dud credit payment to servicentre for returning the defective sub-assembly.

Returnable Parts Return Form:

Panasonic Canada Inc.

Returnable Parts Report Form

NOTE: Claims will not be processed if Returnable Part has not been received by PCI.

Please fill out Form and return with the Returnable Part

Date: _____

Service Center Name: _____

Part Account #: _____

P.O. #: _____ Viera Case #: _____

Warr. Claim #: _____

Model #: _____

Serial #: _____

Part #: _____

Description of Symptom: _____

Is the fault intermittent? No Yes time to failure from power-on _____

Please circle one of the following in each column:

Warranty	Good	Used
Non-Warranty	Defective	Unused

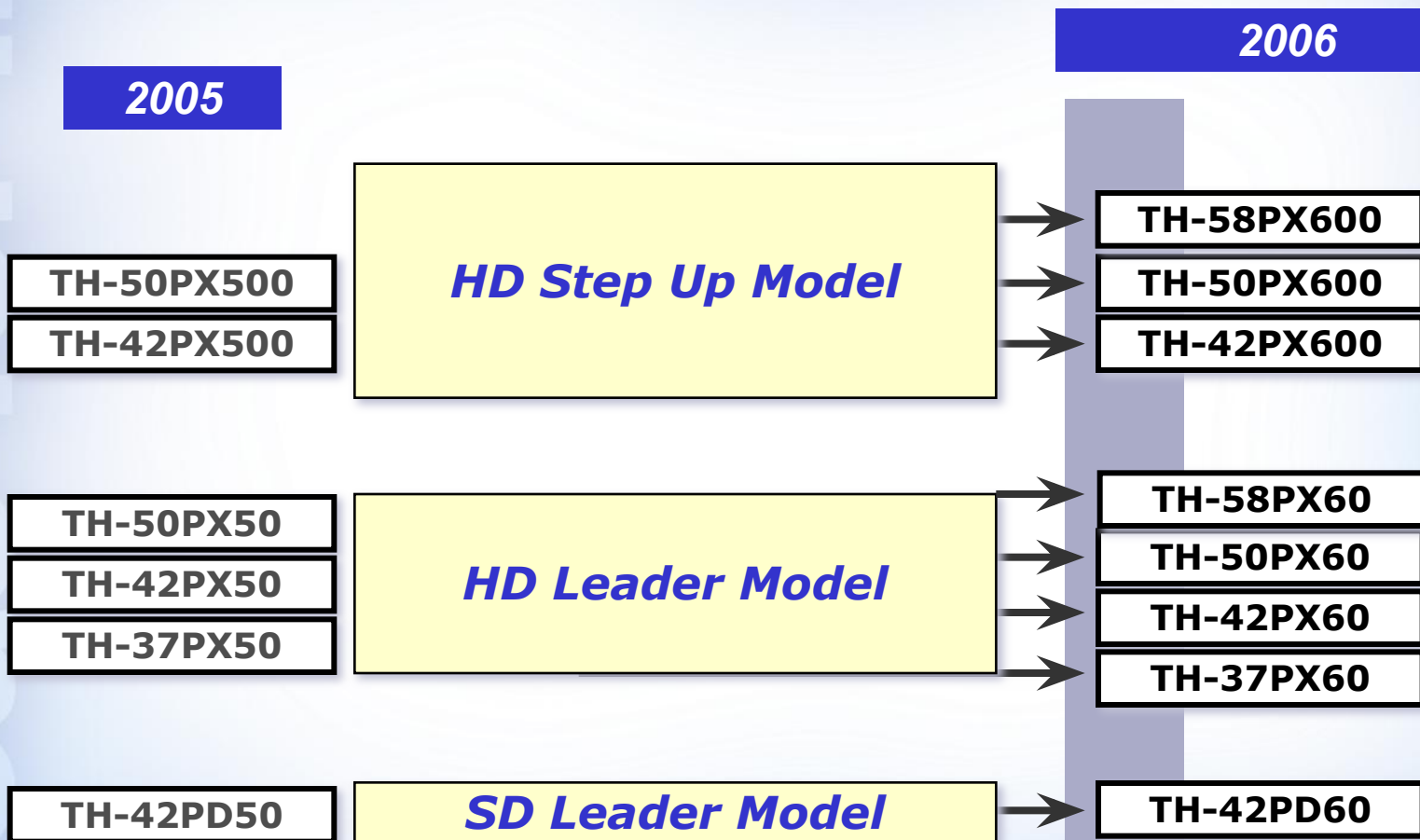
Must be completely filled out and sent together with the defective PC board.

If a board is being returned that is unused please clearly mark the form as unused.

Model line up and PC board functionality

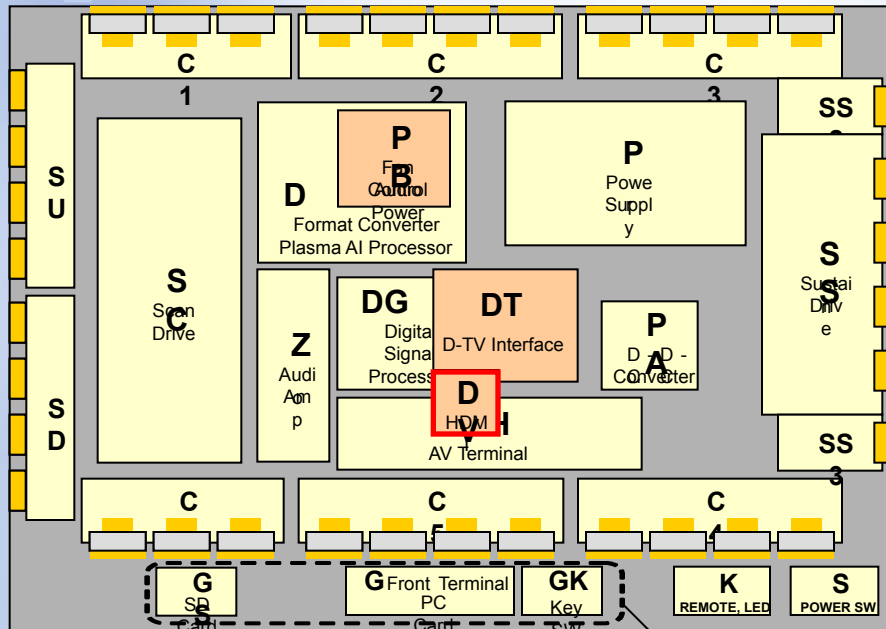


2005/2006 PDP Line-up



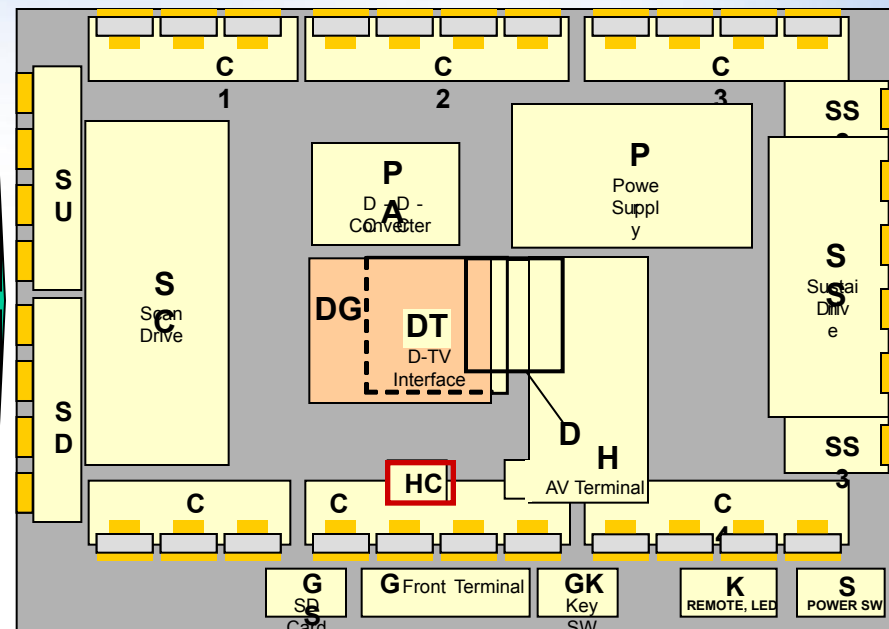
2005 & 2006 PC Board Difference (for 50" models)

2005: 50PX500/PX50



PX500only
y

2006: 50PX600/PX60

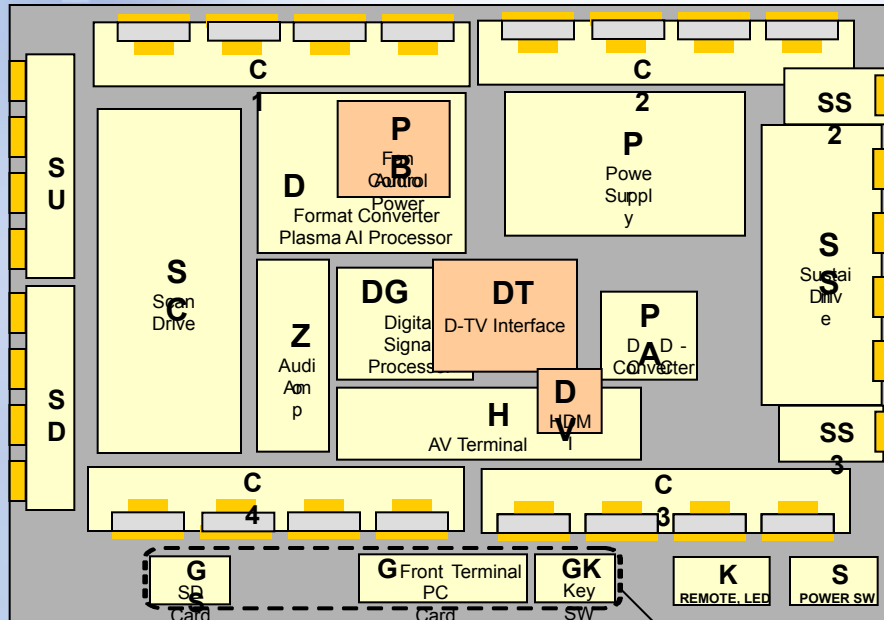


Differences

1. The PB and Z board are now on the PA Board
2. Location of the PA and D board was changed
3. HDMI interface (DV) relocated.
4. HC board added (factory use)

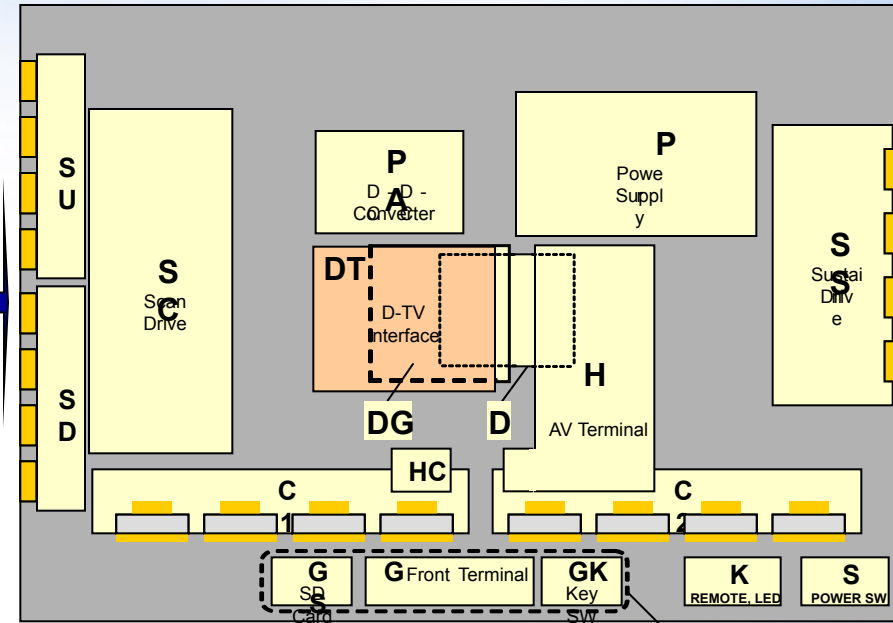
2005 & 2006 PC Board Difference (for 42 & 37" models):

2005: 42/37/PX500/PX50/PD50



PX500only
y

2006: 42/37/PX600/PX60/PD60



PX600/60only
y

Differences

1. The PB and Z board are now on the PA Board
2. Location of the PA and D board was changed
3. HDMI interface (DV) relocated.
4. HC board added (factory use)
5. Reduce the upper C boards for single scan.
6. Reduce the S2 and S3 boards.

2005 Plasma TV PC Board List

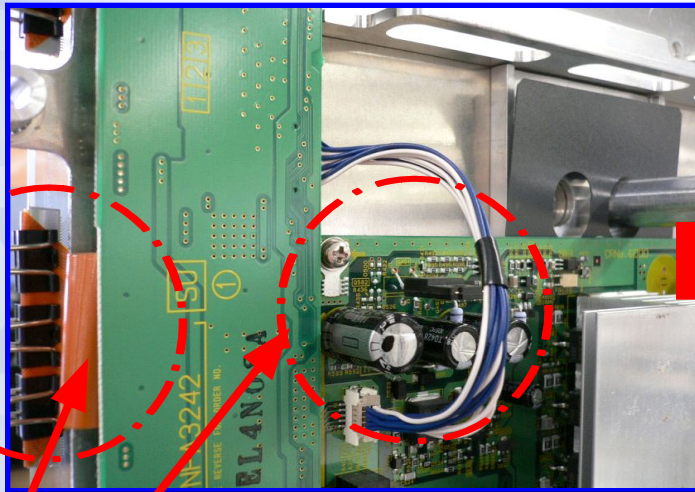
PCB	Description	TH50PX500	TH42PX500	TH50PX50	TH42PX50	TH37PX50	TH42PD50
SU	Scan Out (Upper)	TNPA3219A B	TNPA3189AB	TNPA3219AB	TNPA3189AB	TNPA3551	TNPA3242
SD	Scan Out (Lower)	TNPA3220A B	TNPA3190AB	TNPA3220AB	TNPA3190AB	TNPA3552	TNPA3243
SC	Scan Drive	TNPA3567	TNPA3557	TNPA3567	TNPA3557	TNPA3573	TNPA3543
SS	Sustain Drive	TNPA3568	TNPA3558	TNPA3568	TNPA3558	TNPA3574	TNPA3544
P	Power Supply	ETXMM564M EK	ETXMM563MDK	ETXMM564MEK	ETXMM563MDK	TNPA3570AB	TNPA3570
D	Format Converter/Plasma AI Processor	TZTNP010Y CS	TZTNP010YDS	TZTNP010YCS	TZTNP010YDS	TZTNP010YES	TZTNP010YFS
DG	Digital Signal Processor	TNPA3625A B	TNPA3625	TNPA3625AD	TNPA3625AC	TNPA3625AE	TNPA3625AF
DV	HDMI Interface	TNPA3626	TNPA3626	TNPA3626	TNPA3626	TNPA3626	TNPA3626
DT	ATSC Interface	TNAG157S	TNAG157S	TNAG146S	TNAG146S	TNAG146S	TNAG156
C1	C1 Data Driver	TNPA3561	TNPA3553AB	TNPA3561	TNPA3553	TNPA3547	TNPA3545
C2	C2 Data Driver	TNPA3562	TNPA3554	TNPA3562	TNPA3554	TNPA3548	TNPA3546
C3	C3 Data Driver	TNPA3563	TNPA3555	TNPA3563	TNPA3555	TNPA3549	NONE
C4	C4 Data Driver	TNPA3564	TNPA3556	TNPA3564	TNPA3556	TNPA3550	NONE
C5	C5 Data Driver	TNPA3565	NONE	TNPA3565	NONE	NONE	NONE
C6	C6 Data Driver	TXNC61BHT UJ	NONE	TXNC61YCSU	NONE	NONE	NONE
PA	DC-DC Converter/Power SOS	TNPA3620A E	TNPA3620AE	TNPA3620	TNPA3620	TNPA3620	TNPA3620
PB	Audio Power/Fan Control	TNPA3643A D	TNPA3643AD	TNPA3643AC	TNPA3643AC	TNPA3643AC	TNPA3643
H	AV Terminal/AV Switch	TNPA3598	TNPA3598	TNPA3598AC	TNPA3598AC	TNPA3598AC	TNPA3598AB
Z	Speaker Amplifier		TNPA3621			TNPA3621AB	TNPA3621AB

2006 Plasma TV PC Board List

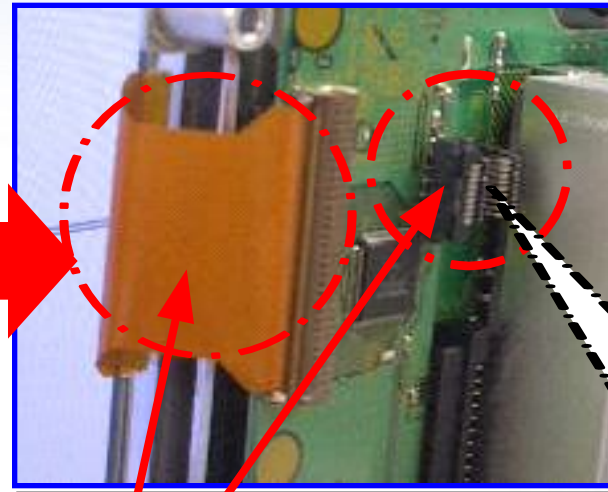
Board	Function	TH50PX600	TH42PX600	
		TH50PX60	TH42/37PX60	TH42PD60
P	Power Supply	●	●	●
PA	DC-DC Converter, Audio AMP, Fan Control	●	●	●
H	AV Terminal, AV Switch	●	●	●
DG	Digital Signal Processor, HDMI Interface	●	●	●
DT	ATSC Interface	●	●	●
HC	Jig Connection (factory use)	●	●	●
D	Format Converter, Plasma AI, S.F. Processor	●	●	●
C1/C2	Data Driver	●	●	●
C3/C4	Data Driver	●		
C5/C6	Data Driver	●		
SC	Scan Drive	●	●	●
SU	Scan out (Upper)	●	●	●
SD	Scan out (Lower)	●	●	●
SS	Sustain Drive	●	●	●
SS2/SS3	Sustain Connector (Up and Down)	●		
K	Remote receiver, Power LED	●	●	●
S	Power Switch	●	●	●
G	Front Terminal	●	●	
GS	SD Card Slot	●	●	
GK	Key Switch	●	●	

2005 & 2006 PC Board Difference:

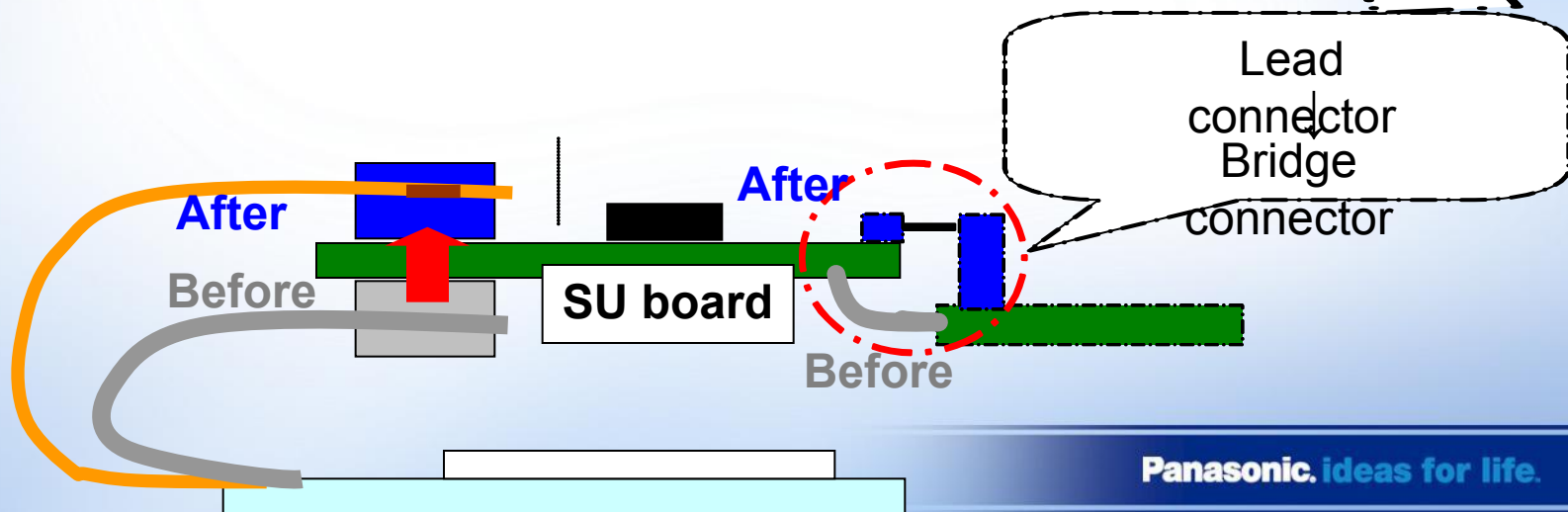
Easier connection and parts change



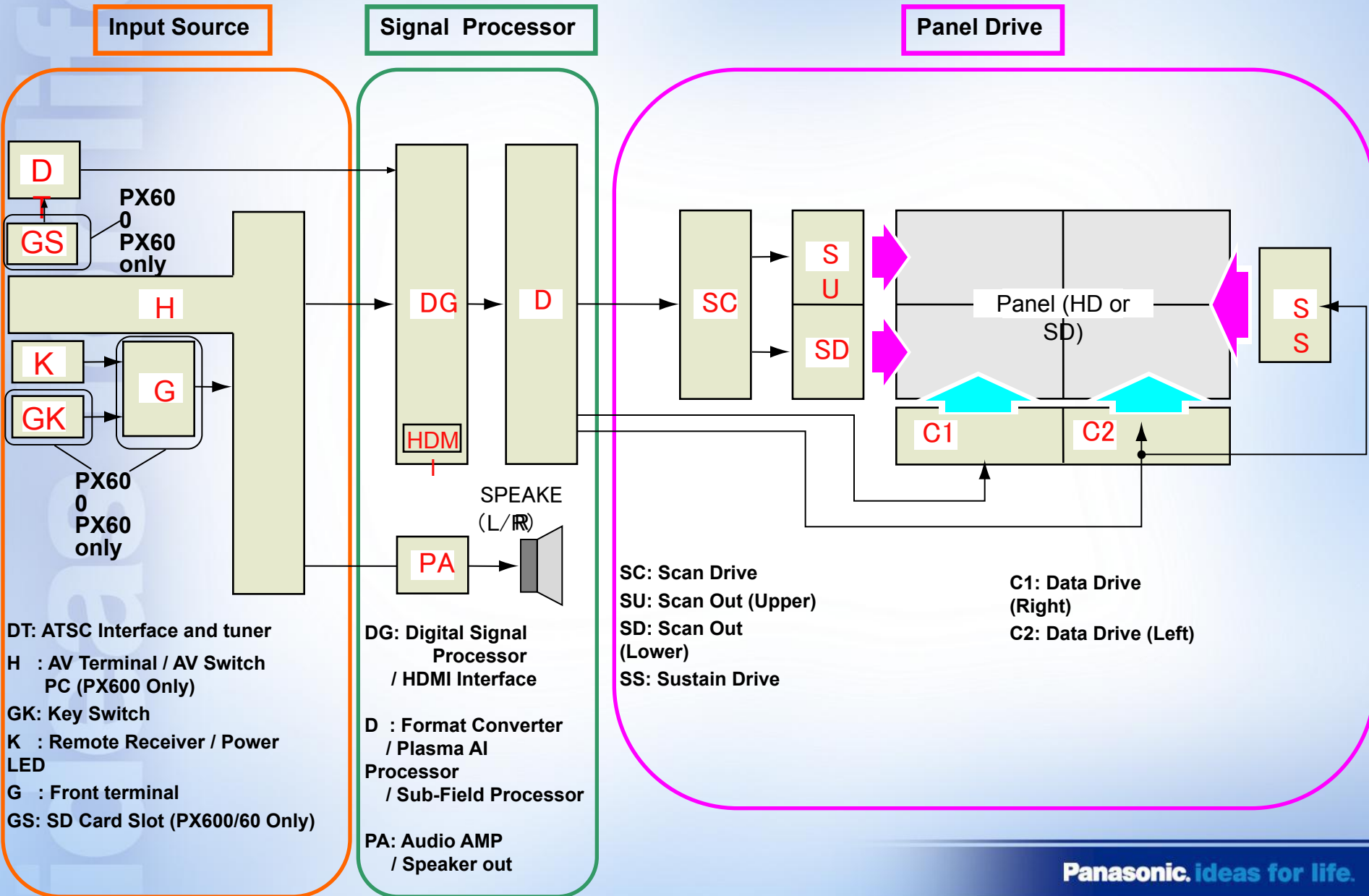
Connecting behind the board



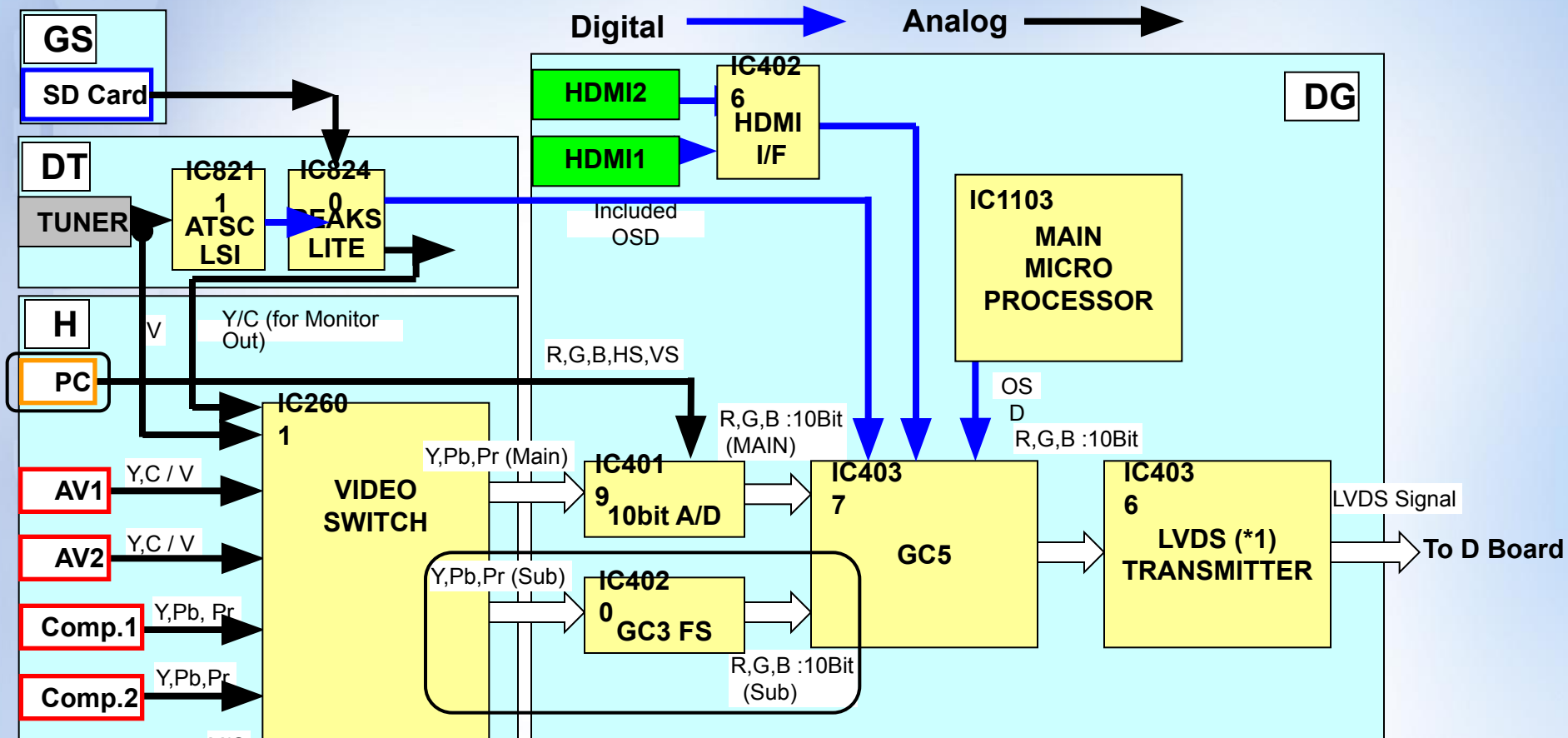
Connecting on the board



General Signal Circuit Flow for 2006 Model (42V & 37"):



General Video Signal Processing: PX600/60 series



<H Board>
 IC2601 : VIDEO SELECT

<DG Board>
 IC4019 : A/D CONVERTER (10Bit)
 IC4020 : SIGNAL PROCESSOR (For SUB WINDOW)
 IC4037 : SIGNAL PROCESSOR (I/P CONV. ,RESIZE MIX ...)
 IC4036 : LVDS TRANSMITTER
 IC1103 : MAIN MICRO PROCESSOR

PX600 only

(*1) LVDS : Low Voltage Differential Signaling

Thank You
For Completing Course One

Course Two
PCB Recycling Component Level Repair
Techniques