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AUTOMATIC COMPONENT MOUNTING DOCUMENTATION

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DK-Audio A/S - PT5201

P/N : 4008 117 08012

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Prepared by : GHDesign Aps

Distributed to :

Approved by

HW engineering : Gunner Bækgaard

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## R E V I S I O N   R E C O R D

Revision	Date	Authorization of change	Pages affected	Brief description of change
1	2002.09.20		All	Original issue of document.
2	2002.12.02		All	New components added.

## 1 INTRODUCTION

### 1.1 Scope

This document and the files provided with it, contains all data and specifications necessary for setting up and carry out machine, manually and post component mounting on the printed circuit board:

PT5201

Revision 2 - DK-Audio A/S P/N 4008 117 08012

### 1.2 Audience and Prerequisites

This document is directed to technical personnel involved in development, production and maintenance of:

PT5201

Revision 2 - DK-Audio A/S P/N 4008 117 08012

Information in this document is intended for use in conjunction with automatic component mount machine dependent information and component vendor dependent information. For details of component specifications please refer to proper information supplied by the customer.

It is recommended, that the component mounting manufacturer receive an endorsement of his or hers interpretation of this document from the customer before starting manufacturing.

### 1.3 Organization of document

Chapter 1 - is this introduction.

Chapter 2 - presents PCB specifications with relevance for the component mounting process.

Chapter 3 - presents the components mounting methods according to its type.

Chapter 4 - presents the assembly drawing for top and bottom side.

Chapter 5 - presents the drill and working sheet including the drill label for the drill sheet.

Chapter 6 - presents the gerber data.

Chapter 7 - describes the definition of component rotation.

## 2 PCB SPECIFICATIONS

### 2.1 Preview:

This chapter presents information about the physical PCB, as a help to setting up an automatic or manually component mounting line.

The size given below describes the minimal rectilinear quadrilateral figure capable of containing the hole PCB. Please refer to the drill and working sheet in the drill chapter for details about the precise outline.

### 2.2 PCB

PCB size approximately : 375.0 mm x 177.6 mm

Thickness : 1.65mm

Laminate code : FR4

Tooling holes : 4

Fiducial marks : 45 on top, 0 on bottom.

### 3 COMPONENT SPECIFICATIONS

#### Preview:

This chapter presents information about the components mounting distribution and soldering methods.

#### 3.1 Mounting distribution

##### Machine mounted components:

please refer to the following files:

COMPLIST.SAT : SMD on top side  
 COMPLIST.SAB : SMD on bottom side  
 COMPLIST.LAT : Leaded on top side  
 COMPLIST.LAB : Leaded on bottom side

##### Manually mounted components:

please refer to the following files:

COMPLIST.SMT : SMD on top side  
 COMPLIST.SMB : SMD on bottom side  
 COMPLIST.LMT : Leaded on top side  
 COMPLIST.LMB : Leaded on bottom side

##### Unspecified components:

please refer to COMPLIST.OTH

##### All components:

please refer to COMPLIST.ALL

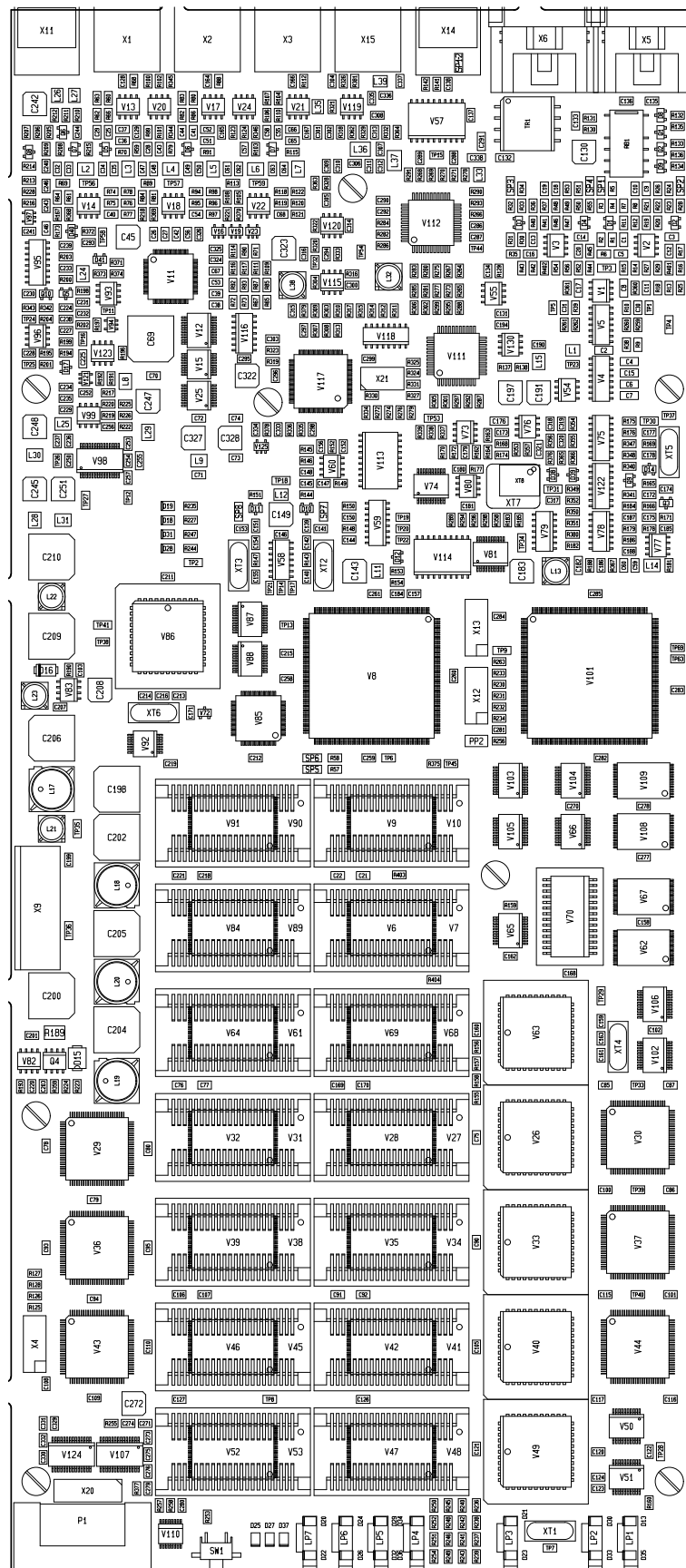
#### 3.2 Soldering methods

Component type	Top side of PCB	Bottom side of PCB
SMD :		
Leaded :		

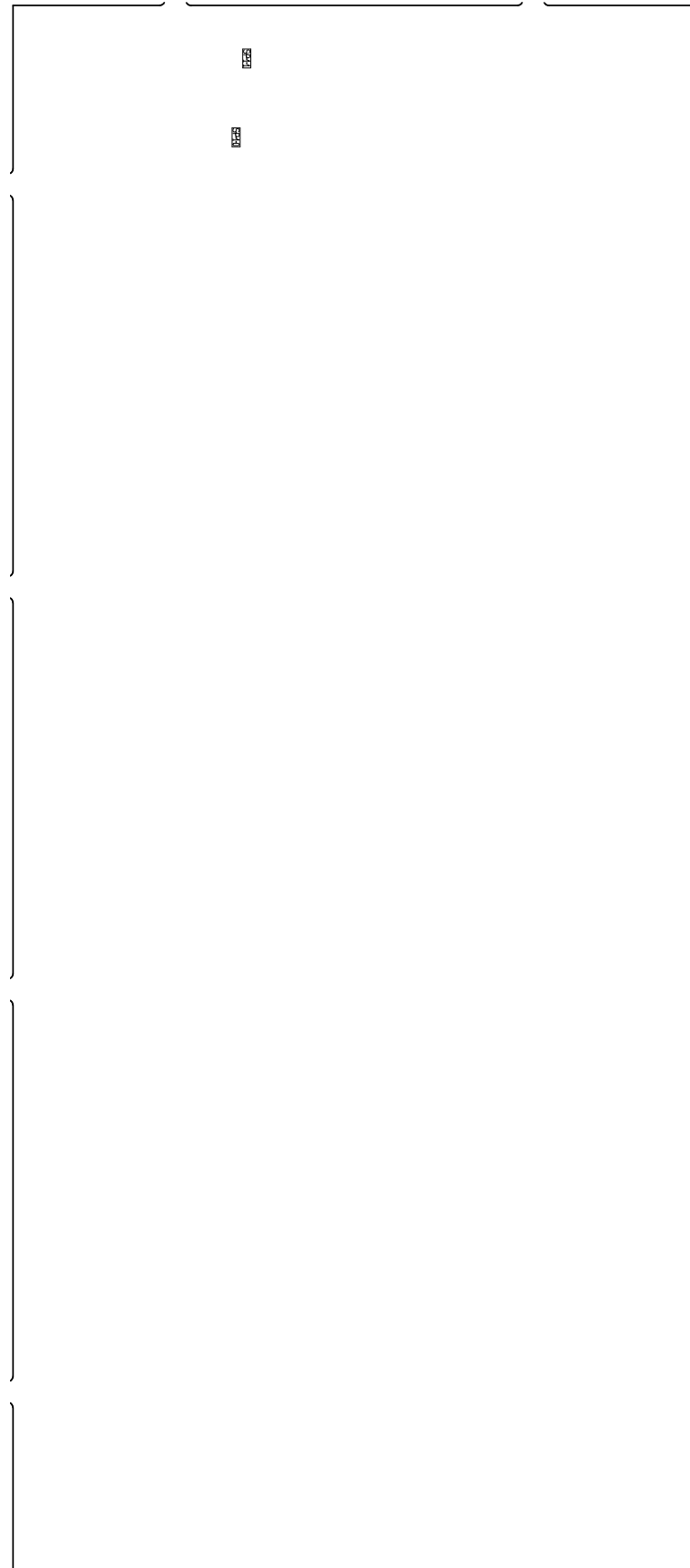
(Please fill in appropriate information in the table above in co-operation with the chosen component mounting manufacturer)

WAS - Wave soldering  
 RES - Reflow soldering  
 IRS - Infrared soldering  
 MHS - Manual hand-soldering

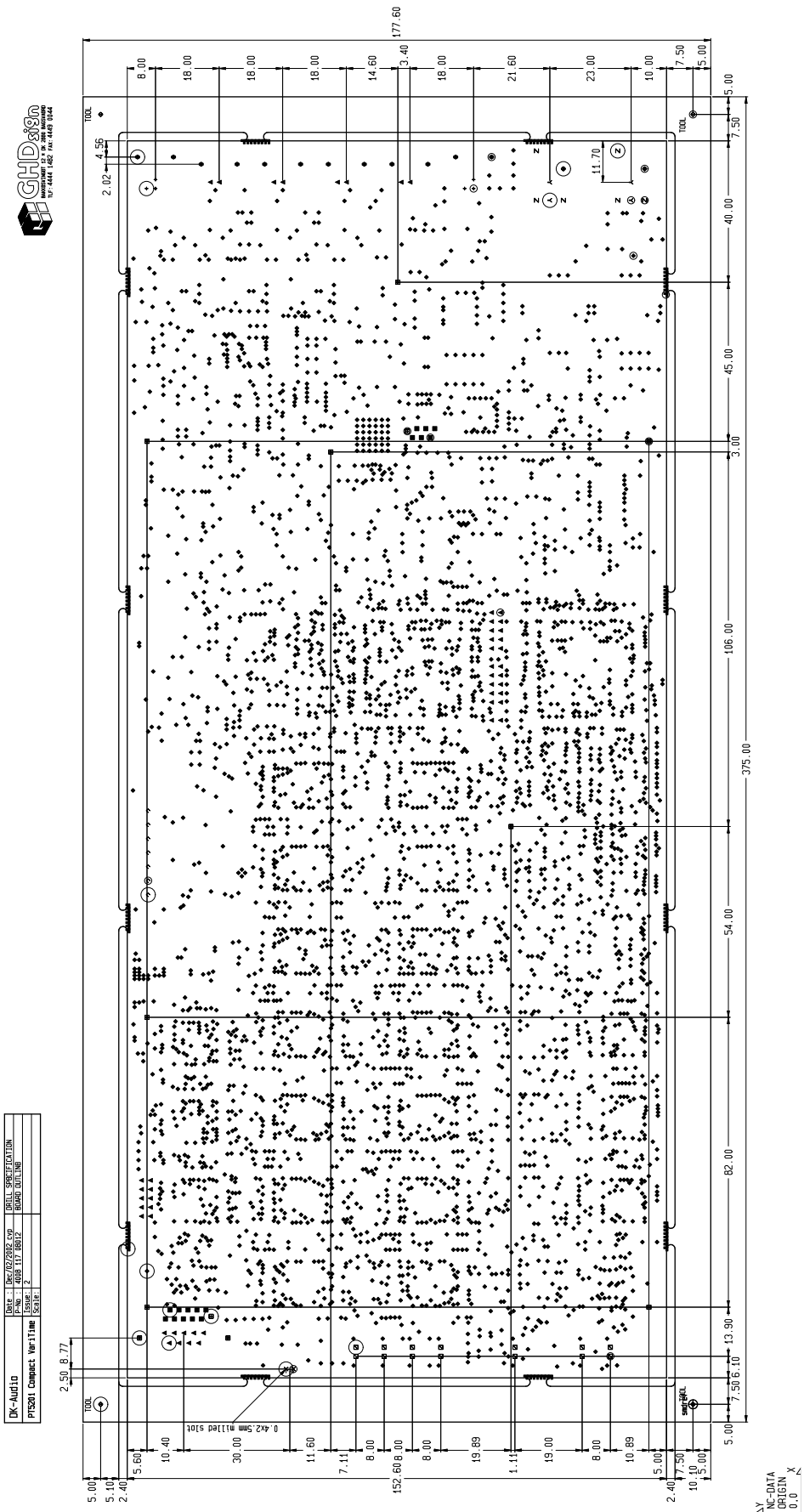
## 4.1 Assembly Drawing Top side - Scale 0.65



## 4.2 Assembly Drawing Bottom side - Scale 0.65



5.1 Drill Drawing - Scale 0.55





5.2 Drill Label - Scale 0.55

symbol	tool	plated	num	size	mill	mm
x	1	y	2	15.8	0.4	
•	2	y	4350	15.8	0.4	TOL= +0/-0.2mm
■	3	y	16	31.5	0.8	
•	4	y	6	35.4	0.9	
▲	5	y	49	39.4	1	
▲	6	y	4	47.2	1.2	
z	7	y	6	63	1.6	
•	8	y	7	66.9	1.7	
•	9	y	12	78.7	2	
■	10	y	10	126	3.2	
■	1	n	96	31.5	0.8	
■	2	n	2	59.1	1.5	
■	3	n	14	61	1.55	TOL= +/-0.075mm
•	4	n	2	63	1.6	
•	5	n	4	118.1	3	

## 6 GERBER DATA

### 6.1 Gerber Data Format

The gerber files comply with the Extended Gerber Format specification, RS-274X.

### 6.2 Gerber Files

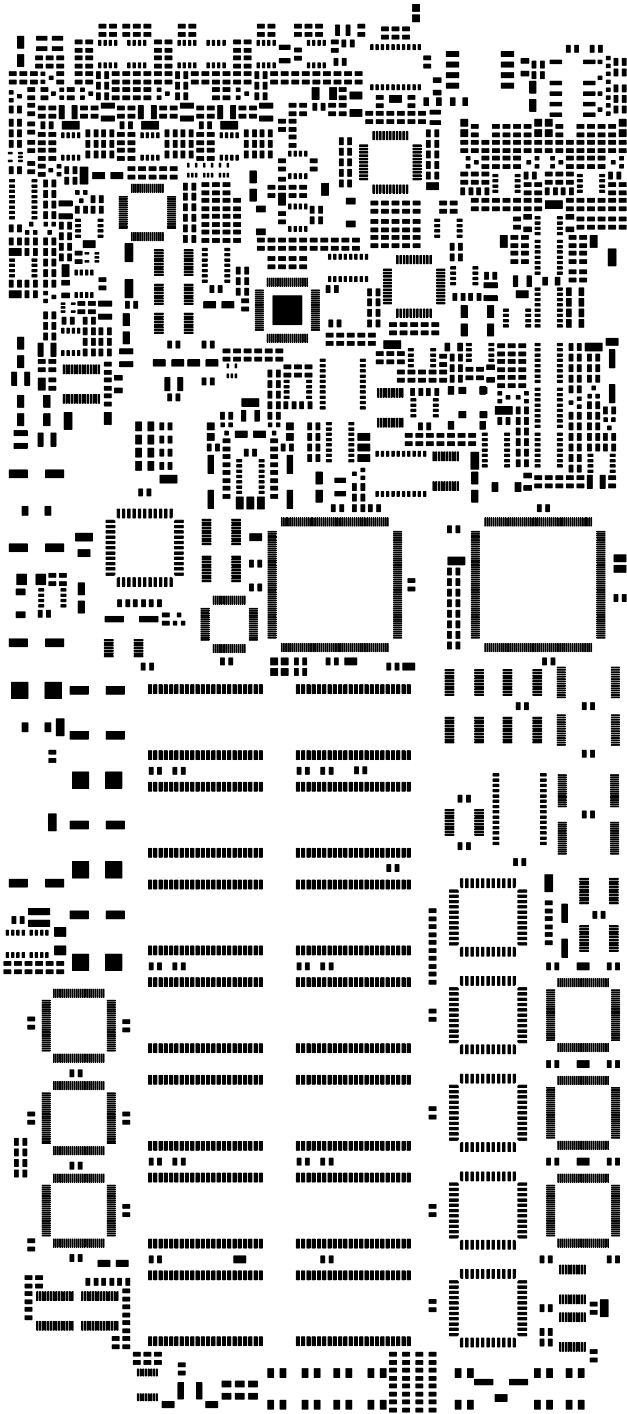
This chapter presents the gerber files accompanying this document.

- 1) File name : TM\_01\_PO.GER  
Tin mask layout for top side.  
Plotted positively in the document.
- 2) File name : FI\_01\_PO.GER  
Fiducial marks for alignment for top side.  
Plotted positively in the document.
- 3) File name : AS\_01\_PO.GER  
Assembly drawing for top side.  
Plotted positively in the document.
- 4) File name : OL\_00\_PO.GER  
PCB Outline, common for top and bottom side.  
Plotted positively in the document.

6.2.1 Layout Drawing - File: TM\_01\_PO.GER - Scale 0.55

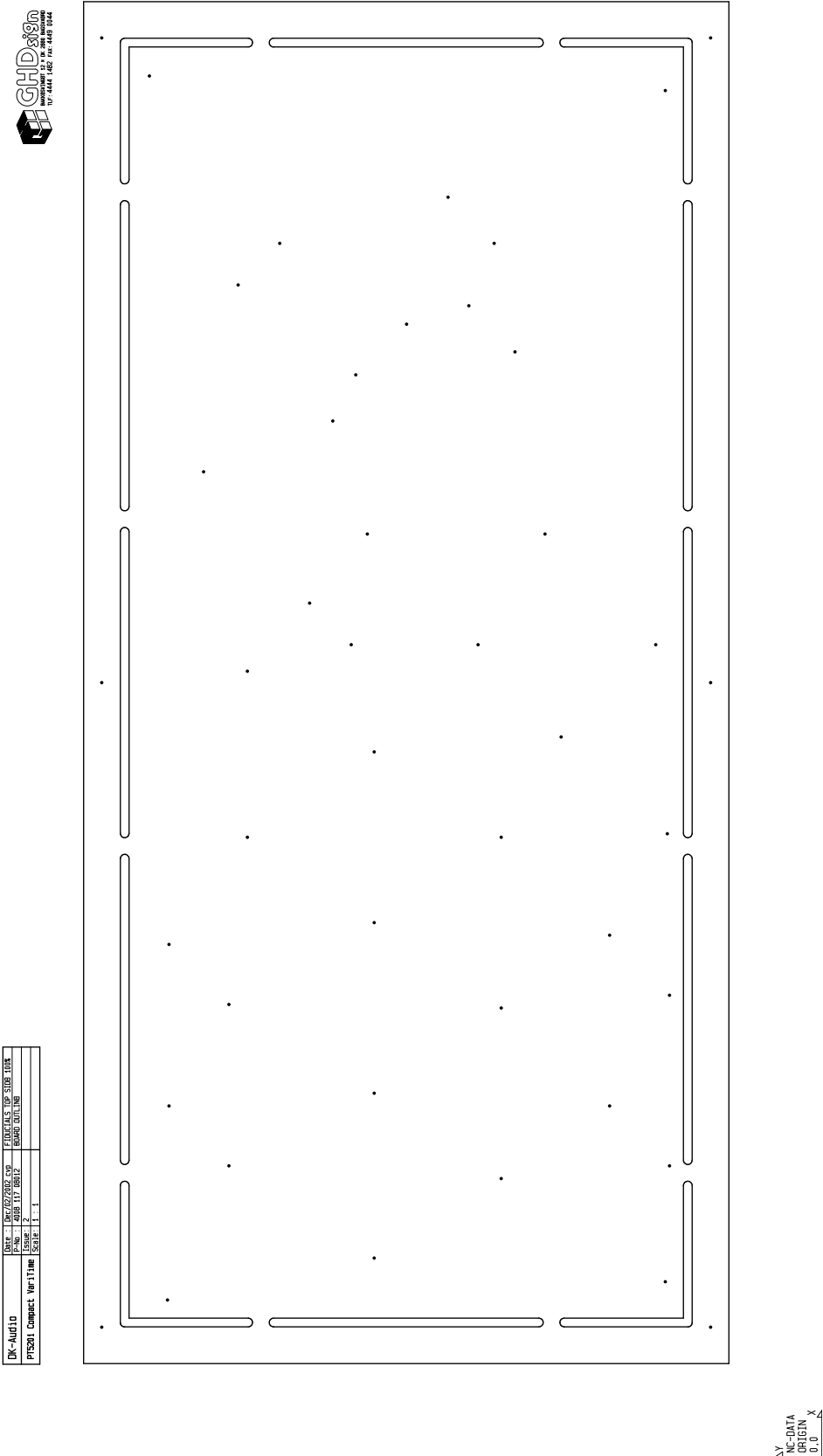


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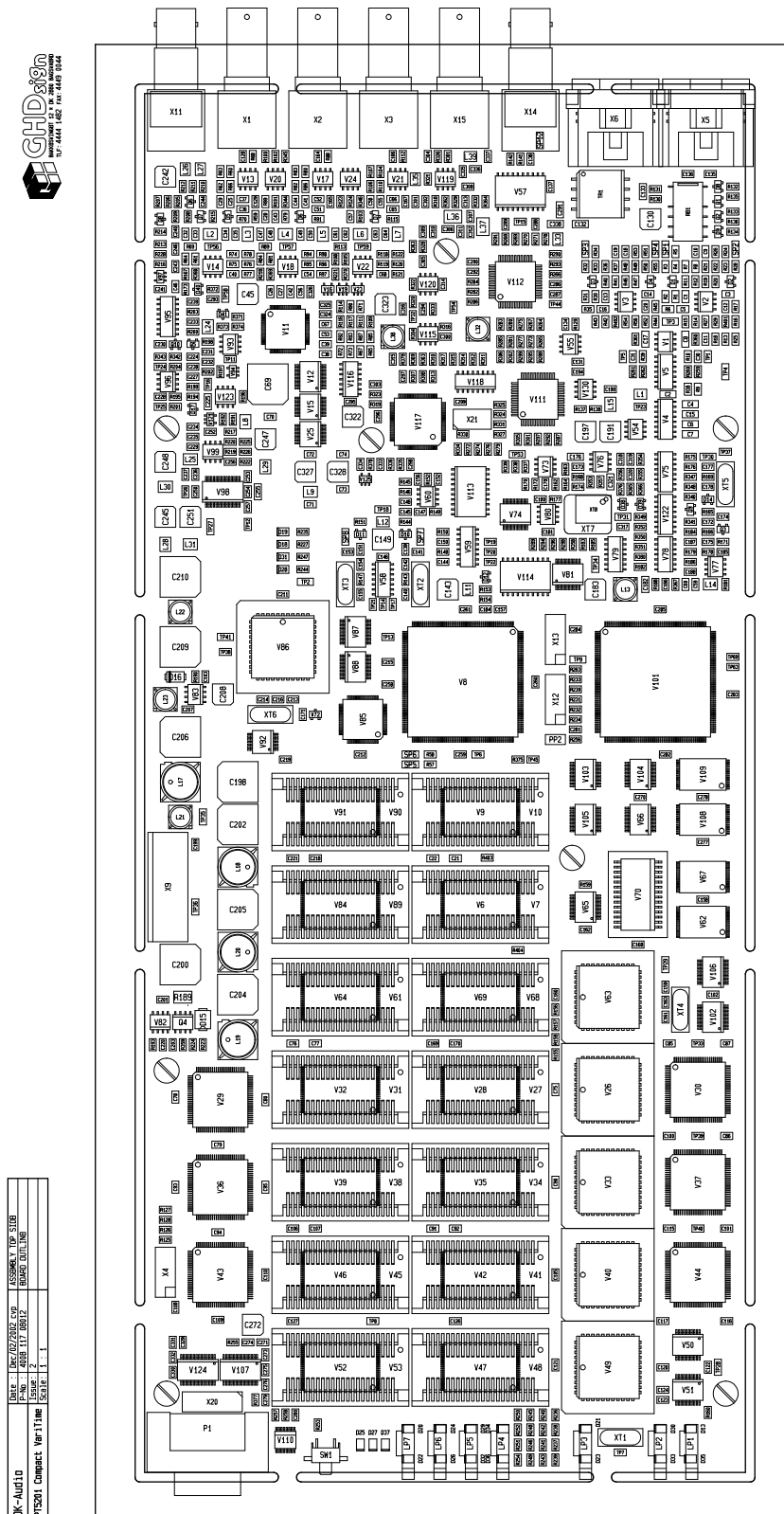


NC-DATA  
ORIGIN  
0.0 X

6.2.2 Layout Drawing - File: FI\_01\_PO.GER - Scale 0.55

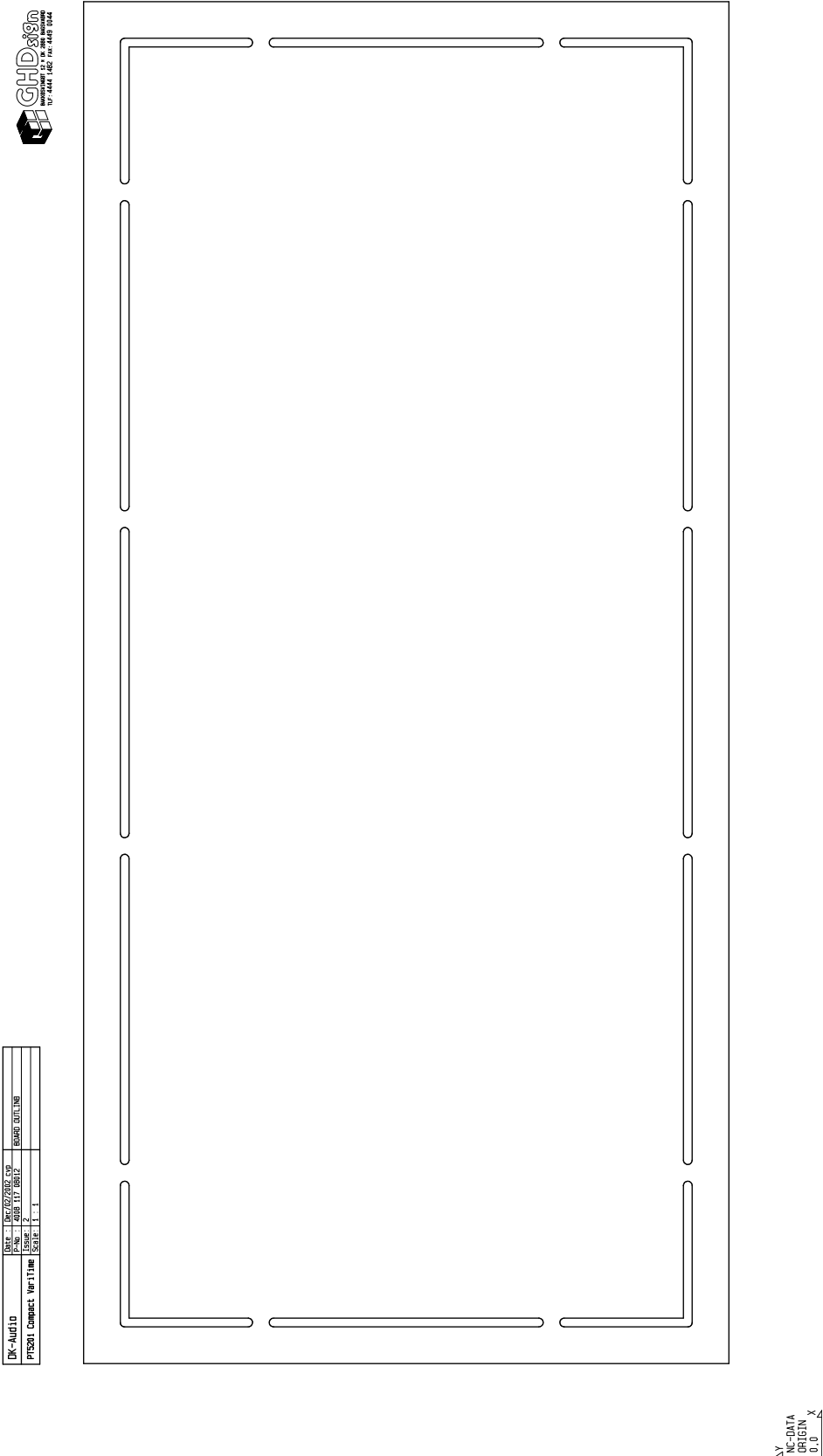


## 6.2.3 Layout Drawing - File: AS\_01\_PO.GER - Scale 0.55

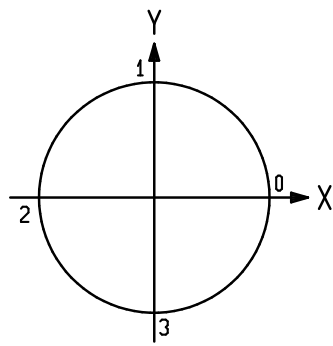


NC-DATA  
ORIGIN X  
0.0

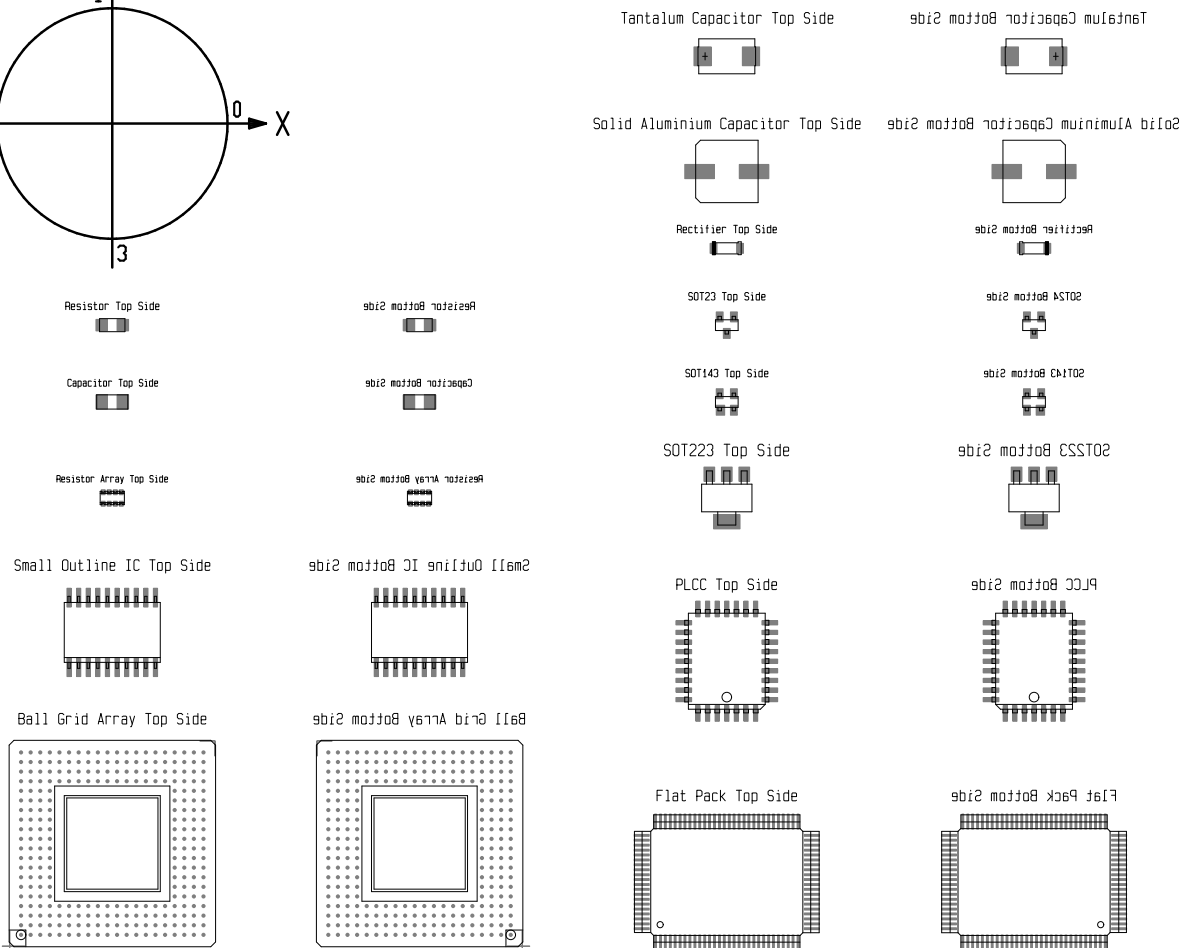
6.2.4 Layout Drawing - File: OL\_00\_PO.GER - Scale 0.55



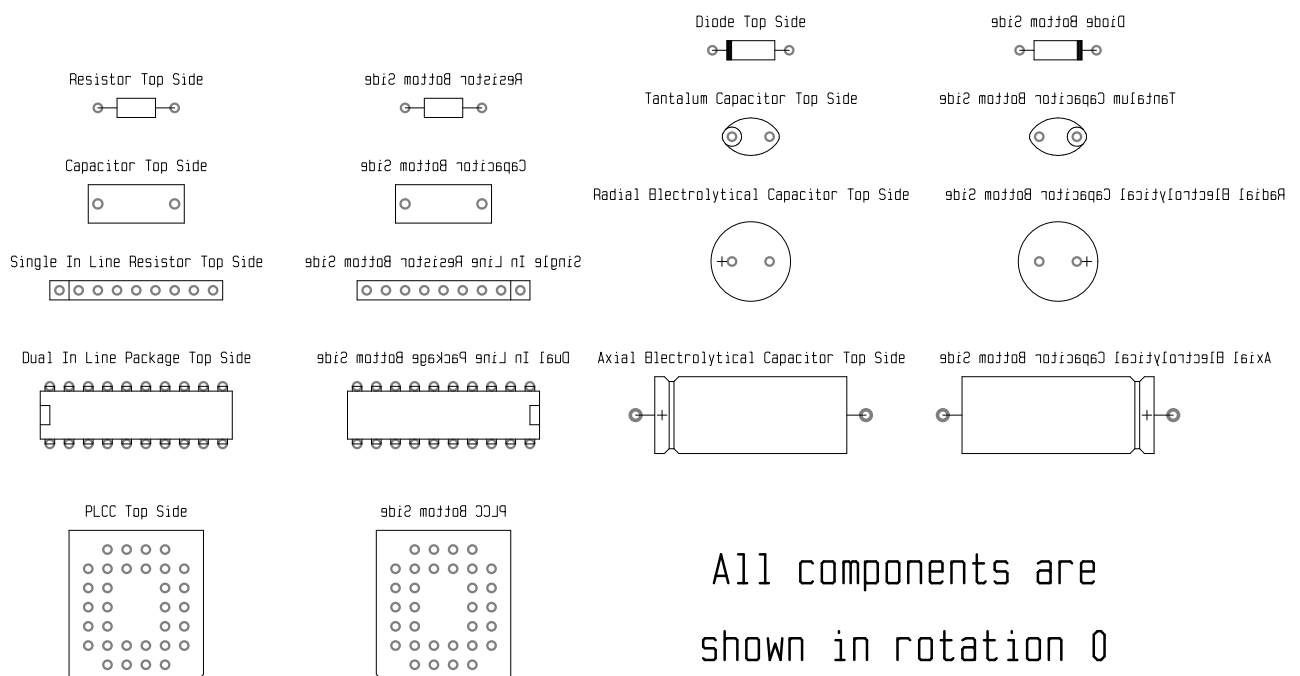
## 7 Component Orientations - Scale 1.00



## Surface Mounted Devices



## Leaded Components



All components are  
shown in rotation 0