

101 inch Micro-LED Set BOM Cost Analysis For TVs

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Table of Contents

1. Ultra-Large Micro-LED Display: Based on a 100-inch-class TV

1.1 Micro-LED Set Structure

3

1.2 Standard Process Flow

4

2. Standard Manufacturing Process: Based on a 100-inch-class TV

2.1 Process Standard Overview

5

2.2 Manufacturing Process Yield Simulation (The Cost Multiplier)

6

3. Manufacturing Cost (BOM) and Yield Analysis: Based on a 100-inch-class TV

3.1 BOM Breakdown for a 101-inch 4K TV

7

3.2 Key material Cost Components (Major Cost Drivers)

8

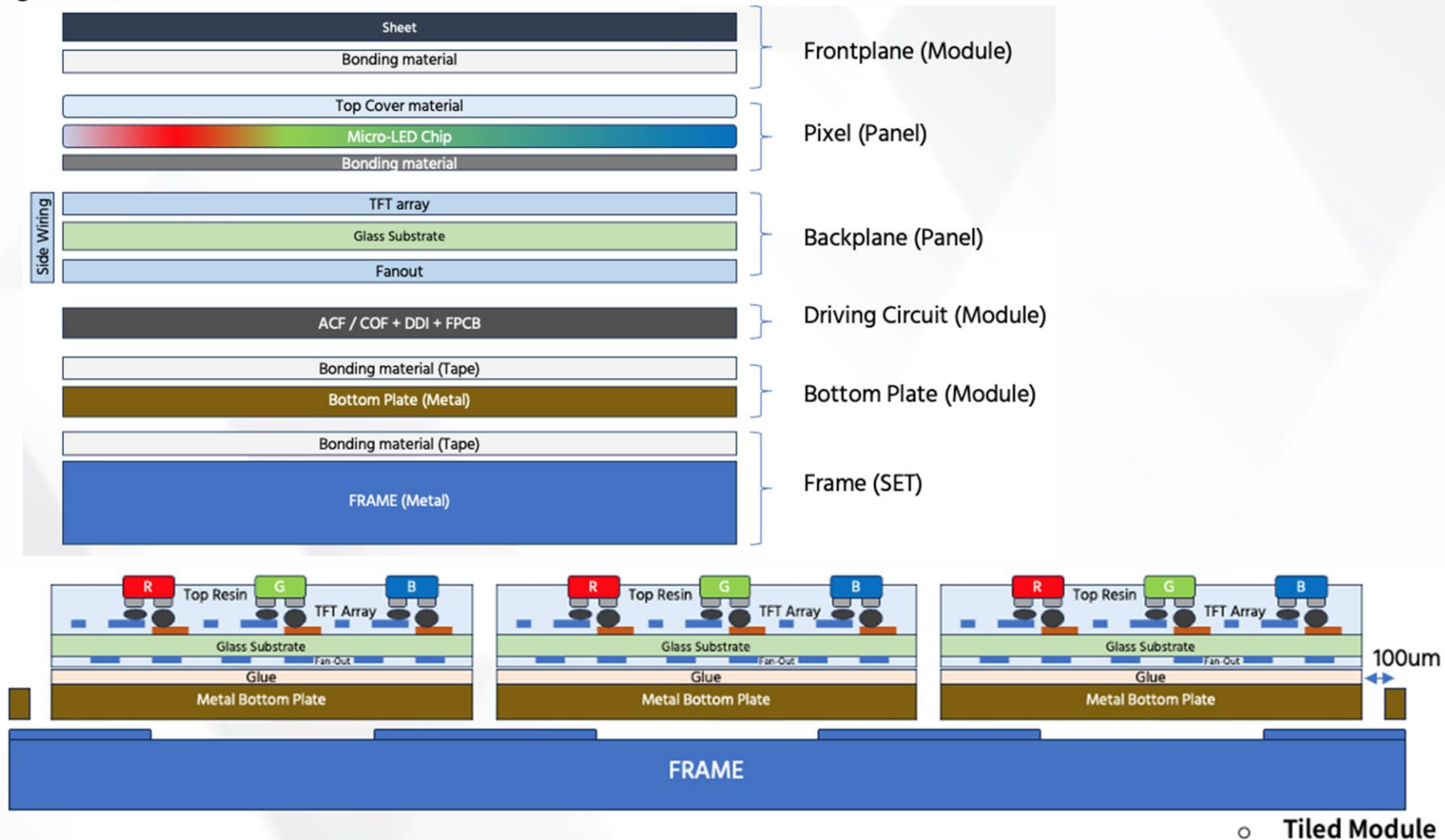
3.3 BOM Analysis for a 101-inch 4K TV

9

Chapter 1. Ultra-Large Micro-LED Display: Based on a 100-inch-class TV

1.1 Micro-LED Set Structure

- The micro-LED module/set structure covered in this report is defined as follows: it is divided into Frontplane, Micro-LED devices, Backplane, Driving Circuit, Bottom Plate, and Set Frame.



Chapter 3. Manufacturing Cost (BOM) and Yield Analysis: Based on a 100-inch-class TV

3.2 Key material Cost Components (Major Cost Drivers)

Structure		Cost (\$)	Ratio
Module	Backing Plate	Bottom Plate	
		Getter	
		Light shield film	
		Selant	
	Driving Circuit	DDi	
		Process material	
		Selant	
	Frontplane	Optical Film	
		Protective Film	
		Selant	
Panel	Backplane	Component	
		Process chemical	
		Process material	
		TFT Array	
	Pixel	Chip Bonding Material	
		Component	
		Micro-LED	
		Process chemical	
		Process material	
		Protective resin	
Set	Frame	Metal Frame	
	Mainboard	Bridge Board	
		Function Board	
Total			

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Process order	Process	Detail process	Structure1	Structure2	Structure3	Material	BOM Cost (\$)
A	TFT glass pretreatment	ACF Lami & Cutting					
		ACF Lami 1st					
		ACF Lami 2nd					
		Bar code Marking (TFT Glass)					
B	Transfer substrate 1						
C	Transfer substrate 2	B-LED wafer input					
		G-LED wafer input					
		R-LED wafer input					
		Transfer plate cleaning 6"					
		2nd Multi LLO					