

Table 1: Bill of Materials for the POcKeT Colposcope with estimated cost per unit fabrication cost in US dollars

Schematic Label	Component	Manufacturer	Part #	QTY	Function
1a	2.0MP Color CMOS Detector with manual focus only	Vividia	UM07	1	Digital Camera Module with USB 1.0
1b	5.0MP Color CMOS Detector with Autofocus	Supereyes	A005+	1	Digital Camera Module with USB 2.0
2-1 2-2	3D Printed ABS TVDC Case and Handle	Custom, Statasys Dimensions 1200es		2	Ergonomic handle for user and protective casing
3	3D Printed ABS Polarizer Mount	Custom, Statasys Dimensions 1200es		1	Spacer to hold detector side polarizer
4	Linear Glass Polarizer	Edmund Optics	43-782	1	Glare reduction from cervix
5	Concentric Ring PCB	Custom, ExpressPCB		1	Mounting base for LEDs and Polarizers
6-1	White 5000K Miniature LEDs	Philips Lumileds	LXZ1-5070	4	White Field Illumination
6-2	Green Miniature LEDs	Philips Lumileds	LXZ1-PM01	4	Green Field Illumination
7	High Contrast Linear Polarizer Film, 0.18 mm Thickness	Edmund Optics	86-183	1	Glared reduction from cervix
8	Medical Grade USP Class VI Heat Shrink Wrap Tubing with repeated sterilization compatibility	Insultab	Xtra-Shield HS-714	1	Waterproof, chemical resistance barrier; ETO, gamma, autoclave, H ₂ O ₂ gas, glutaraldehyde compatible
9	Micro USB to USB OTG Host Adapter M/F Cable	Startech	UUSBOTG	1	Interfaces camera module with smartphone
10	Microcontroller	Arduino	Micro	1	Microcontroller
11	System Controller, LED Drivers PCB	Custom, ExpressPCB		1	IC mounting and interface board
12	Darlington Transistor with TTL interface	Texas Instruments	ULN2803-APG	1	Allows for PWM control of constant current drivers
13-1 13-2	Linear Temperature Compensated Constant Current LED Driver ICs	Microchip Inc.	CL2N3-G CL25N3-G	3 3	Constant current drivers for LEDs
14	12.8V Rechargeable Lithium Battery Pack	Powerizer	2061	1	Provides system power for mobile operation
15	Nexus 5 16GB	Google	Nexus 5	1	Android based smartphone for image storage and transmission